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1903
NINETEENTH ANNUAL
SEED CATALOGUE
R & K
RATKIN'S
SEED HOUSE
FARM
FIELD
& GARDEN
SEEDS.
SHENANDOAH,
IOWA.



Established 1884.

Nineteenth Year.

Ratekin's Seed House, Shenandoah, Ia.



The Largest Seed House of its Kind in America.

ESTABLISHED 1877.

THOS. H. READ, Pres.

E. A. READ, Cashier.

J. F. Lake, Ass't. Cash.

THE FIRST NATIONAL BANK.

SHENANDOAH, IOWA.

CAPITAL AND SURPLUS \$100,000.

Shenandoah, Ia., Dec. 15, 1901.

To Whom it may concern:

We have known the firm of J. R. Ratekin & Son for a good many years, the senior member of this firm having been a pioneer in this locality.

They are active, wide awake business men, and do a large business in seeds, particularly seed corn; their customers covering the entire corn growing belt.

They are customers of this bank, and we have always found them straight and reliable in their business relations.

Respectfully,

THOS. H. READ, President.

U. S. Postoffice.

Shenandoah, Ia., Jan. 1, 1903.

To whom it may concern: I take pleasure in saying that I have known Messrs. Ratekin & Son, of this place, for many years and can recommend them as trustworthy, energetic business men. Mr. Ratekin, senior member of this firm, has been engaged in the seed business here for many years and has sold and shipped large quantities of Seed Corn and other seeds to all parts of the country, including many states and territories, and I have never heard of a complaint from any customer. Respectfully submitted,
C. N. Marvin, Postmaster.

Office of C. M. Conway, Mayor.

Shenandoah, Iowa, Jan. 1, 1903.

To whom it may concern:—

This is to certify that I am well acquainted with the seed firm of J. R. Ratekin & Son, of this city, and I take pleasure in recommending them to the public as being reliable and trustworthy. They are one of the largest of Shenandoah's big institutions, their business being of such magnitude that it extends to all parts of the United States and of the world.

C. M. Conway,

Mayor Shenandoah, Iowa.

Established 1884.

Our Nineteenth Year in the Seed Business.

To Our Friends and Patrons:

It is with pleasure we present to you our annual seed catalog for 1903 and thank our many old and new customers for our numerous and liberal orders, your kind words and liberal patronage. This we appreciate and assure our customers that we shall always endeavor to merit their patronage and support by supplying them with the very best and most reliable seeds to be had at most reasonable prices. Since our first beginning in the seed business in 1884, our business has steadily grown each year until we can now count our customers by the thousands. Our success is laid to the fact that we have supplied all who patronized us with the highest quality of seed at lowest prices. We do not try in any case to compete with competitors who are closing out old seed they have carried over from year to year, but we at all times supply our customers with the newest and freshest seed to be placed on the market, and to give them such satisfaction that we shall receive their entire orders and retain them from year to year. Our business has steadily grown until now we control one of, if not the largest, seed businesses in America; the growth of our business and the confidence our old customers repose in us are sufficient evidence.

In making up our catalog we have thoroughly revised and rewritten as well as increased the size, to make it of practical value to every one who receives it, also to aid our customers in the selection of such varieties as will best meet their requirements and conditions and to give them such hints on cultivation as our long experience suggests. We have carefully avoided exaggerated claims of merit and the reader can be assured that every variety in this book has fully equalled our description of it. Last season we received orders from every state and territory in the United States and from every county and town in all the agricultural states, and our highest ambition is to deserve the title which has been applied to us, namely, "Ratekins' Seeds are Reliable."

To those who receive this catalog we wish to say, in making our prices we have made them as low as good seed can be obtained and very low in comparison to other seed houses, which we are able to do for several reasons. We own our own offices, buildings and warehouses, and have not the big expenses of city seed houses, such as big rents, help and general expenses which are double in the city. We are farmers and seed growers, and we know what is adapted to the need of the farmers better than city seed dealers who never plowed a row of corn or raised a field of grain; general farming has been our business for over fifty years, grain and diversified farming has been our study and we have the experience, knowledge and understanding of what is most profitable farming. You take no chances in sending to us for seed, only natural causes such as drouth, floods, pests, etc. will defeat your efforts. Success either in your home or market garden depends more upon the quality of seed used than any other factor. You cannot afford to take any risks or waste your time and labor on inferior or questionable seeds, no matter how cheaply they may be offered. Plant your whole farm and garden with "Ratekins' Reliable Seeds." Remember us more often in connection with your wants and remember our desire is to be pleasant and agreeable and above all to save you money. We solicit your orders this season and assure you they will receive our most careful attention and at all times be executed to your entire satisfaction. We thank you for your kind interest and all past favors and respectfully solicit a continuance of them in the future. We remain yours truly,

J. R. Ratekin & Son.

Our Special Seed Corn Catalog.

In addition to our regular Farm, Field and Garden Seed Catalog, we have issued a special seed corn catalog and "book on corn growing," which will be mailed free to every one who receives this seed annual, who is interested in the growing of field corn of the best varieties.

We have made the growing of seed corn our leading specialty for the past nineteen years, during which time we have introduced our seed into every state where corn is grown to any extent at all. In fact, we have sold and sent our seed corn to every state in the Union, besides to Canada, Mexico and South Africa. Last year alone we sold and shipped more than thirty thousand bushels to one state; besides we received and sent seed to every county in the five leading corn growing states, namely, Iowa, Illinois, Kansas, Nebraska and Missouri.

We are the largest growers of seed corn in the United States, and during the past five years have sold and sent out more seed than any other growers, and more than all the Seed Houses of America combined. If at all interested in corn growing don't fail to write for our "Book on Corn and Corn Growing." A postal card will bring it. Write today if at all interested.

Suggestions to Customers.

Please observe the following rules and directions, and mistakes and misunderstandings will be avoided.

How to Order. Always use the order blank and envelope sent with the catalog, when possible; write plainly, keep a copy of your order, and be sure and sign your name, post office, county, and state every time you write us, and above all the name of your freight station, also railroads.

Order Early. It would be a great accommodation to us if more of our customers would order their seeds as soon as they receive our catalog, as we could always give your orders more of our personal attention. If, however, you should postpone ordering even until the seeds are actually needed, you can rely upon getting them promptly.

Shipping. We are located on the C. B. & Q. R. R., on the Omaha & St. Louis Line, the Wasbush Railway and the Keokuk & Western Railroad, Shenandoah being the terminus of the latter, so that quick shipments can be made to any town in the United States. It is well to remember that express charges are usually very much higher on heavy goods, and you should order them sent by fast freight.

We Send Shipping Receipts And take special pains to keep shipments moving to their destination, and if not received within reasonable length of time, please notify us and we will send a tracer after the delayed shipment.

Our Terms Are strictly cash with order; we do not send C. O. D. as the cost of collecting return charges are quite an unnecessary item of expense, and the prices being given, we can conceive of no necessity to warrant goods being so sent.

How to Send Money. Remittances may be made at our risk by any of the following methods, viz: Post office money order, bank draft, express money order, registered letter, and in sums of \$1.00 or less in postage stamps. The rates for post office money order or express orders are very low and these are the most convenient modes for sending money, consequently the best for most of our customers.

Prepaid Rail Road Stations. Many of our farmer customers live at prepaid rail road stations, where there are no agents; in such cases we ship the goods to the nearest station to the prepaid station as we never pay freight charges on heavy seeds, unless charges are advanced.

Our Reliability. As this book will probably go into the hands of many who are unacquainted with us, this question will naturally arise, and in answer to same we refer you by permission to the First National bank of this city, to the Postmaster, Mayor, Dunn or Bradstreet's agencies.

Seeds by Mail. It's all right to buy soap, sugar, nails, etc., at your local store, but it is all wrong to get living, vital seeds there; they do not or cannot live under the conditions found in the average grocery store; sending seeds by mail is a very important branch of our business, and we are prepared to fill orders promptly and correctly the day they are received. Buy fresh seeds by mail; you can receive them any place in the United States in forty-eight hours or less.

Discounts. We offer the following inducements to those purchasing seeds in packets. Select packets to the value of \$1.25 send us \$1.00; for \$2.50 send us \$2.00; for \$3.00 send us \$2.25; for \$4.00 send us \$3.00; for \$5.00 send us \$3.75; for \$10.00 send us \$7.50; for \$20.00 send us \$15.00. The seeds will be sent by mail post paid, but these low rates apply to seeds in packets only, and at catalog prices, and not seeds by weight or measure.

We Pay Postage On all packets. Ounces, two ounces, quarter pounds or pounds, ordered at list prices, will be sent free by mail or express. Customers ordering enough for a freight shipment—100 pounds or more—or desiring to pay their own express charges, may deduct 10 cents per pound from prices of this catalog on all seeds quoted by the pound or less.

Our Seed Annual. Please show this seed annual to your friends, and if you should receive an extra copy get it. We will be pleased to send a copy free to any one of your friends in this or any other country likely to want seeds; in return we will ask you to speak a good word for us to your friends and neighbors. An order, no matter how large or small, we take the same particular pains in filling it.

Be Free to Write Us for any information pertaining to our business and not found in this catalog on a separate sheet of paper from your order, as your letter goes to the general office and your order to the mail order department. Always be free to write, we always like to hear from our friends and customers.

Rush Orders. If time is limited and you wish to order seed of any kind over the telephone or telegraph, go to your banker or postmaster, put up the money and have them wire or telegraph us what you want and we assure you that it will have our prompt attention and be shipped on first train possible.

If you have rural mail delivery be sure to give the name and number of your route when ordering.

Guarantee. Complaints made that seeds are not good should quite as often be attributed to other causes as to the quality of seeds. There are hundreds of contingencies continually arising to prevent the best seeds always giving satisfaction, such as sowing too deep, too shallow, in too wet or too dry soil, insects of all descriptions destroying the plants as soon as or before they appear; wet weather, cold weather, frosts, chemical changes in the seeds, induced by temperature, etc. For the above reasons it is impracticable to guarantee seeds under all circumstances. We give no warranty, express or implied, as to description, purity, productiveness or any other matter of any seeds we send out, and we will not be in any way responsible for the crop. If the purchaser does not accept the goods on these terms they are at once to be returned.

Market Gardeners And others who buy beans, peas, sugar corn or seeds in bulk, make out your list and send to us, and we will make you our lowest wholesale prices; club orders of same kind we make the same low prices. We guarantee that all our seeds shall reach our customers in good condition.

Free Seeds. Any one sending us twenty names of their friends and neighbors who send away for new fresh seeds each year we will mail free five packets of any vegetable seed you may select from our book.

Our Packet Seeds Are full size, and contain the best and freshest seeds and are not to be compared with the half-size or poorly-filled packets which are so largely offered through the country and by cheap advertisements. If you want quantity and quality, and splendid vegetables, always order **Ratekin's Reliable Seeds.** Remember we pay the postage on all seeds at packet, ounce and quarter pound rates.

J. R. Ratekin & Son,

Shenandoah, Iowa.

Seed Collections

Delivered Free by mail to any place in the United States or Canada large full sized packets of Ratekins' Reliable Seeds.

The following collections have been prepared with a view to placing in our customers' hands seeds of finest quality at very reasonable prices. While these collections are cheap, quality has in no case been sacrificed; all are made up from the same high grade stocks we furnish to our market gardener trade; we carry no other stock and the seeds are of course put up in our regular size packets. We are not only looking for your trade this year, but it is our purpose to retain it; therefore we make these surprisingly low offers as a special inducement to try our seeds. The trial we feel sure will secure you as a permanent customer.

It is hardly necessary for us to warn you not to buy commission box seeds of doubtful age and quality, when you can obtain from us First-Class Seeds delivered at your door by mail, at such remarkably low prices.

Vegetable Seed
Collection No. 1

25c

Beet—Early Blood
Turnip
Cucumber—Chicago
Pickle
Carrot—Half Long
Red
Lettuce—Black Seed
Simpson
Onion—Yellow Globe
Danvers
Radish—Early Scarlet
Turnip
Tomato—Stone

Vegetable Seed
Collection No. 2

50c

Bean—Golden Wax
Beet—Early Blood
Turnip
Cabbage—Early
York
Carrot—Half Long
Red
Celery—White
Plume
Corn—Early Cory
Cucumber—Improved
Long Green
Musk Melon—Rocky
Ford
Water Melon—Cole's
Early
Onion—Yellow
Globe Danvers
Parsnip—Hollow
Crown
Pepper—Large Bell
Peas—American
Wonder
Radishes—Extra
Early Scarlet Top
Ruta Baga—Purple
Top
Tomato—Stone
Pumpkin—Sweet or
Sugar
Squash—Hubbard

Great Vegetable

SEED COLLECTION

Number 3.

35 packets

for

\$1.00

1. Asparagus—Conover
2. Beets—Eclipse
3. Beans—Golden Wax
4. Beans—Lazy Wife
5. Corn—Early Cory
6. Cabbage—Early York
7. Cabbage—Early Jersey
Wakefield
8. Carrots—Ox Heart
9. Cauliflower
10. Celery—White Plume
11. Celery—Giant Pasco
12. Cucumber—Chicago Pickle
13. Cucumber—Improved
Long Green
14. Kohl Rabi
15. Lettuce—Improved Han-
sen
16. Lettuce—Early Prize Head
17. Leek—Broad Flag
18. Melon—Cole's Early
19. Melon—Kolb's Gem
20. Musk Melon—Rocky Ford
21. Musk Melon—Extra Early
Hakensack
22. Onion—Large Red Weath-
erfield
23. Parsnip—Hollow Crown
24. Pepper—Ruby King
25. Peas—American Wonder
26. Parsley—Moss Curled
27. Radish—Early Scarlet
Turnip
28. Radish—Early Long Scar-
let Short Top
29. Pumpkin—Sweet or Sugar
30. Ruta Baga—Purple Top
31. Salsify—M. S. I.
32. Squash—Hubbard
33. Turnip—Purple Top Flat
34. Tomato—Acme Early
35. Tomato—Stone

**This Collection Cannot be Broken
under any Circumstances.**



Garden Seeds By Mail.

We will furnish Garden Seeds at the prices on the following list, post paid, except heavy seeds, such as beans, peas, corn, onion sets, clovers, grains, grass seeds, etc. For these it will be necessary to add 5 cents per pound to cover postage. Half pounds sold at pound rates.

You may select seeds in packets amounting to

\$1.25 for every \$1.00 sent us

For seeds ordered in packets.

Asparagus

Culture—Beds are usually formed by setting plants one or two years old, which can be procured of us. If you wish to grow plants yourself, pour hot, but not boiling, water on the seed and let stand until cool; pour it off and repeat two or three times, with fresh hot water. Then sow in drills one foot apart and two inches deep in light, rich soil. When the plants are well up, thin to about one inch apart, and give frequent and thorough cultivation during the summer. If this has been well done, the plants will be fit to set the next spring. The permanent beds should be prepared by deep plowing or spading and thoroughly enriching the ground with stable manure or other fertilizer. If the subsoil is not naturally loose and friable, it should be made so by thoroughly stirring with a subsoil plow or spade. Set the plants about four inches deep and one to two feet apart in rows four to six feet apart. After the plants are well started give frequent and thorough cultivation. Early the next spring spade in a heavy dressing of manure, and one quart of salt to each square rod and cultivate well as long as the size of the plants will permit or until they begin to die down. The next season the bed may be cut over two or three times, but if this is done, all the shoots, no matter how small, should be cut. After the final cutting, give a good dressing of manure, ashes and salt. Cultivate frequently until the plants meet in the rows. In autumn, after the tops are fully ripe and yellow, they should be cut and burned. If well cultivated and manured the bed should give a full crop the following season and continue productive for eight or ten years.

Conover's Colossal A mammoth green sort of the largest size and of good quality. Pkt. 5c; Oz. 10c; 2 Oz. 15c; 1-4 Lb. 20c; Lb. 50c.

Beans = Postage, 15 cents per quart, extra.

Culture—No crop responds more readily to good soil and cultivation than this. The soil best adapted to it is a light, rich, well drained loam, which was manured for the previous crop. If too rank manure is used it is apt to make the plant run too much to vine. Beans are extremely sensitive to both cold and wet, and it is useless to plant them before the ground has become dry and warm. The largest returns will result from planting in drills from two to three feet apart, and leaving the plants two to six inches apart in the row. Up to the time of blossoming they should have frequent shallow cultivation, but any cutting of the roots after the plants come into bloom is likely to cause the blossoms to blast and so cut off the crop. Remember that the cultivation of beans should always be very shallow, and that it is useless to expect a crop from a field so poorly prepared as to need deep stirring after planting.

Varieties should be selected so as to give a succession both of string and green shelled beans. The wax podded varieties will degenerate into a mixture of green and wax podded plants unless there is constant attention given to the removing of any green podded plants which may appear in the seed crop, and the constant selection of plants of the highest type for stock seed. Hence it is especially important to use seed from reliable sources only.

BEANS - Wardwell's Early Kidney Wax....



WARDWELL'S EARLY KIDNEY WAX.

One of the earliest, hardiest and most productive of all wax beans. It is nearly a week earlier than the Golden Wax, and yields one-third more, and it is almost entirely free from rust and spots. The pods are long and showy, very tender, stringless, and of excellent quality. Pkt. 5c, $\frac{1}{4}$ pt. 15c, qt. 50c; by exp. $\frac{1}{2}$ pk. 90c; pk. \$1.60.

Challenge Black Wax.

Earlier, more productive and of better quality than the old Black Wax. Pods tender, round, fleshy and stringless. Pkt. 5c, $\frac{1}{4}$ pt. 15c, qt. 45c, by exp. $\frac{1}{2}$ pk. 85c, pk. \$1.50.

Davis White Wax.

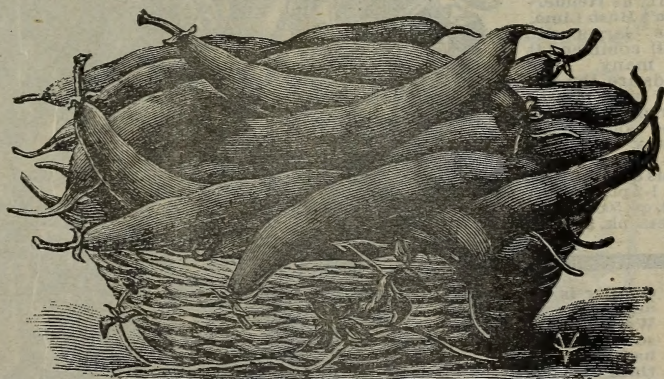
A new white, rustless, productive, wax-podded bean; pods flat, very long, white; straight, and handsome; seeds clear white; excels all others in hardness and productiveness. Valuable for market gardener's and canner's use. Pkt. 5c, $\frac{1}{4}$ pt. 15c, qt. 50c; by exp. $\frac{1}{2}$ pk. 90c, pk. \$1.60.

Improved Golden Wax

In spite of all the new sorts of beans being introduced every year, our trade calls for more Golden Wax than any other variety. This great popularity is due largely to the fact that the variety we have is a great improvement on the old Golden Wax, having larger pods and being much more prolific. This improved stock is one of the handsomest beans we have ever seen, the pods being of dark, rich golden yellow color and of perfect shape. For family or market you can make no mistake in planting them. Pkt. 5c, pt. 25c, qt. 45c; by exp. $\frac{1}{2}$ pk. 75c, pk. \$1.40.

Extra Early Valentine.

There is nothing superior to this variety among the green podded sorts, and many prefer it to the wax varieties. Vines erect, with coarse, dark green leaves and large white blossoms. Pods medium length curved, cylindrical, with crease in back; very fleshy, crisp and tender. Beans medium size, long, irregular, pink, marbled with red. Among green podded varieties, there is none, we think, that can compare with our stock of Valentine in fleshiness and high quality of pod. Many different strains of Valentines are offered under slightly varying names, each claiming to be a great and distinct improvement. We have carefully examined them all, both in trial and large yield, and have none which we were willing to substitute for our stock, which combines all the good qualities. Pkt. 5c, $\frac{1}{4}$ pt. 15c, qt. 45c; by express or freight $\frac{1}{2}$ pk. 75c, pk. \$1.40.



IMPROVED EARLIEST VALENTINE.

If beans are wanted by mail or express, prepaid, add 10 cents per pint, 15 cents per quart, for charges.

Write for our Special Catalog of seed corn and "Book on Corn Growing" mailed free on application.

BEANS -- CONTINUED.



STRINGLESS GREEN POD.

Stringless Green Pod.

The only stringless green pod bush bean in cultivation. Consequently it surpasses all others in crisp, tender flavor. The finely shaped, long green pods are absolutely stringless, and are ready to market two weeks earlier than the Valentine. It is of immense value, not only to the market gardener, but also to the amateur who seeks a rare quality early for the home table. Pkt. 5c, ¼ pt. 15c, qt. 50c; by exp. ½ pk. \$1.00, pk. \$1.75.

Early Kidney Six Weeks.

Vines large, vigorous, branching, productive, with large leaves and lilac blossoms; pods long, straight, narrow, handsome, and when young, of good quality; beans long, kidney-shaped, yellowish-drab with darker marks about the eye. Pkt. 5c, pt. 15c, qt. 25c, 4 qts. 75c, bushel \$4.00.

Best of All.

Originated in Germany. Pods long, very tender, succulent, stringless, of rich flavor, and an enormous producer. Very popular, especially in the south. Excellent for winter shell beans. Price—Pkt, 5c. pt, 25c, qt, 40c.

BURPEE'S BUSH LIMA

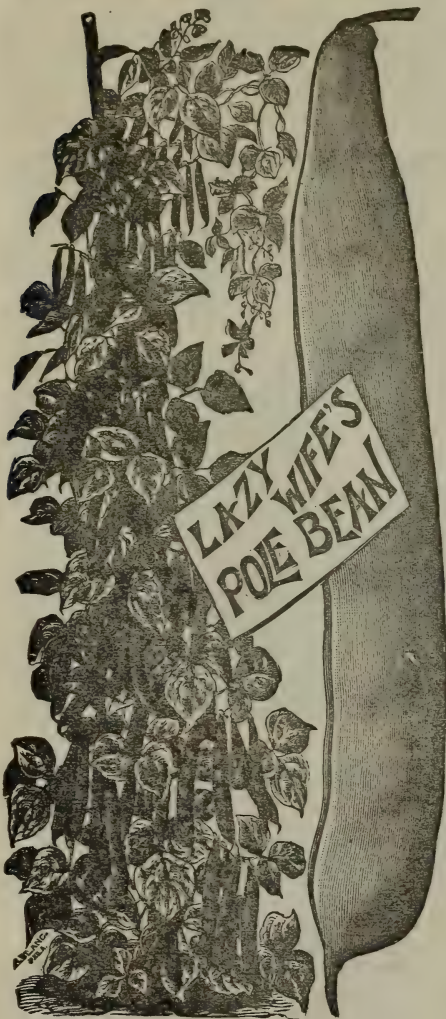
This is a bush form of the well known large white lima bean. It is very fixed in its bushy character, growing to a uniform height of about 20 inches. While not so early as Henderson's Bush Lima, its larger size will commend it to many. The pods are the exact size of the large Pole Limas and contain as many beans of the same delicious quality. Pkt. 5c, 1-2 pt. 20c, pt. 80c, qt. 50c; by express, pk. \$1.70.



BURPEE'S BUSH LIMA.

Quality is our motto
We will absolutely
handle no thing but
the best

BEANS *Continued* LAZY WIFE



This variety originated in Bucks County, Pennsylvania, where for a number of years it has been the most popular Pole Bean grown. Pods are wonderfully broad and fleshy, and above all stringless. In many respects they surpass anything we know of. Then, again, the pods retain their rich, stringless and tender qualities until they are almost ripe; so much so in fact, that we are perfectly safe in saying that they are the best of all Snap Shorts. They also surpass every variety in the way of vines clinging to the pole. Its name, we think, implies productiveness, for the vines being covered all summer with masses of beautiful pods, it is just the sort to suit lazy wives, as a mess can soon be picked for dinner. Pods which are green are rather flattish, oval shape, and then when fully grown are from 6 to 8 inches long, exceedingly rich, buttery and fine flavored when cooked. They are hardy, easily grown, and enormously productive. Price—Pkt. 5c, $\frac{1}{2}$ pt. 15c, qt. 50c; by exp. $\frac{1}{2}$ pk. \$1.10, pk. \$2.00.

Red, Speckled, Cut Short, or Corn Hill

An old variety, very popular for planting among corn. It will give a good crop without the use of poles; vines medium, twining loosely, with dark colored, smooth leaves and white blossoms in small clusters; pods short, cylindrical and tender; beans nearly oblong, cut off diagonally at the ends, white, covered at one end and slightly over the whole surface with redish-brown dots. Pkt, 10c, pt, 25c, qt, 35c, 4 qts, \$1.25, bu, \$7.50.

Don't get the idea that our seeds are inferior because they are so low in price. There is no better offered by any seed house. Our prices are wholesale to the farmers. We are after 50,000 new customers this year, and will get them by dividing our profits with our customers.

Henderson's Bush Lima Bean.

Magnificent dwarf growing Lima; very early, of a delicious flavor, extremely productive and should be planted in every garden in America. It's early, it's fine, it's just the thing for a family garden. It is wondrously prolific. A package or a pint will furnish sufficient for a good sized family. It is one of those beans that can't be improved upon. Pkt. 5c, pt, 25c, qt 40c. by express, pk, \$1.00.

LIMA WAX.

A great bean—Dwarf. Produces tremendous quantities of broad, thick, meaty, wax pods of light color. Seed white of Lima flavor. Pkt. 5c, pt, 25c, qt, 40c; by express, pk, \$1.70, bu. \$5.50.



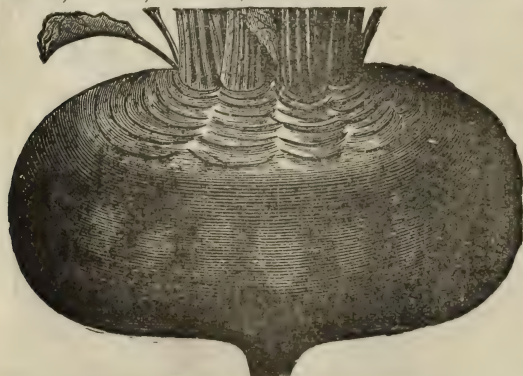
BEEETS

Culture—The best results are obtained on a deep, rich, sandy loam. For general crop sow as soon as the ground will permit in drills eighteen inches apart and thin out to three inches in the row. For winter use, the turnip varieties may be sown in June, and the beets may be kept by storing in a cellar and keeping covered with sand, or sandy soil, to prevent wilting, or they may be kept out doors in pits such as are used for apples and potatoes. One or two ounces, or single packets of two or three sorts, will give a good supply for a large family. It is best to sow in freshly prepared soil, which should be pressed firmly over the seed. One ounce sows 50 feet of drill—4 to 6 pounds for one acre.



Extra Early Dark Beauty One of the earliest ever grown. Beautiful oval shape, and the color is a rich, dark red. Flesh is fine grain and cooks tender; rich and sweet. Its flavor is superb. Is free from side roots, and smooth, and is very beautiful in market. Pkt. 5c. oz. 10c, 1-4 lb. 18c, 1-2 lb. 30c, 1b. 50c.

Extra Early Egyptian Blood Turnip. The best variety for forcing, and excellent for first early crop out of doors, being very early, with small top. Leaf stems with veins dark red, leaf dark green, dotted with red; roots very dark red, rounded on top but flat beneath, with very small tap roots; flesh dark red, zoned with lighter shade, hard, crisp and tender when young, but becoming woody with age. Pkt. 5c. oz. 10c, 2 oz. 15c, 1-4 lb. 20c, 1b. 60c.



Crosby's Egyptian.

Early Eclipse..

Tops small, dark purplish green, shading to lighter color on outside of leaves. Roots nearly globular, with a small tap root and very small collar. Flesh dark red, zoned with a lighter shade, very sweet, crisp and tender, especially when young.

Pkt. 5c, oz. 10c, 2 oz. 15c, 1-4 lb. 20c, 1b. 60c.

Crosby's Egyptian...

The name of this variety is misleading, as it resembles the Egyptian only in its extreme earliness. It is larger, lighter colored and more nearly spherical; one of the best for early planting out of doors. It is a most excellent sort, becoming fit for use sooner than any other variety, but it is not as well suited for forcing in hot-beds or for transplanting as the Egyptian. Pkt. 5c, oz. 10c, 2 oz. 15c, 1-4 lb. 20c, 1b. 60c.

Beets Continued--SUGAR BEET

SEED—There is no crop where the quality of the seed used is of greater importance than this; inferior seed cannot, by any amount of skill in cultivation, be made to give a satisfactory yield. A great deal of most patient and skillful labor has been expended in establishing and developing strains of beets, which are adapted to sugar making. It is only by the use of the best seeds that profitable sugar making is possible.

Planting and Cultivating The great secret of successful and economical culture of beets is thorough preparation of the soil before planting. The seed should be planted as soon as the soil can be gotten into good condition, which is not likely to be before the middle of April, but the seed should be in before the last of May. We plant in drills twenty to thirty inches apart, dropping from twelve to twenty seeds to the foot. This will require from ten to fifteen pounds of seed to the acre. It is very important that the seed be well covered with not to exceed one inch of soil pressed firmly over it. As soon as the young plants have started sufficiently to make the rows visible they should be cultivated and the field should receive constant attention so as to keep the surface soil loose and destroy the starting weeds. When the beets are about two or three inches high they should be thinned so as to stand six to eight inches apart in the row, and cultivation should be discontinued as soon as the roots have commenced to form. Often a crop is injured by late cultivation which starts the plants into fresh growth when they should be maturing and developing sugar. Sugar beets ripen and become fit for harvesting as distinctly as do potatoes or corn, and they indicate that they are approaching this condition by the outer leaves turning yellowish and the top seeming to decrease in size owing to the curling of the central leaves. They should be gathered and stored when ripe or mature, for if left they may start into fresh growth, which lessen the proportions of sugar. The successful cultivation of beets rich in sugar requires rotation of crops, however rich and good the soil may appear to be.

Vilmorin's Improved In general the most desirable beet for the sugar factory is the one containing the largest percentage of sugar. In this variety we have one of the richest sorts in cultivation, and moreover it will do better on new lands than any other variety, suffer less from an excess of nitrogen, and will keep the best. In size it is medium or a little below, yielding from ten to sixteen tons per acre, and containing, under favorable conditions, as high as eighteen per cent of sugar. The beet grows below the surface. The green leaves are smooth edged and spreading. Pkt. 5c; oz., 10c; 1-4 lb., 15c; lb., 35c.

French Very Rich A variety with large, long roots yielding from fourteen to twenty tons per acre, and often containing as much as eighteen per cent of sugar. The roots are below the surface. The green leaves are upright in growth. The hardest and earliest grown. Pkt., 5c; oz., 10c; 1-4 lb., 15c; lb., 35c.

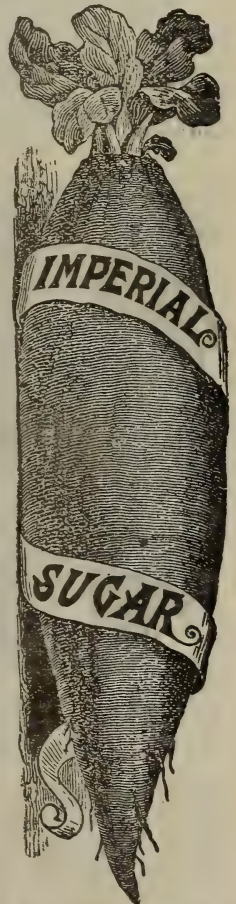
Klein Wanzleben A little larger than Vilmorin's Improved, and containing about the same amount of sugar. Its yield of beets is from twelve to eighteen tons per acre. The beet grows below the surface. The green leaves are rather large and spreading with wavy edges. A little harder and easier grown than Vilmorin's Improved. Probably the best sort for the experimenter to use. Pkt., 5c; oz., 10c; 1-4 lb., 15c; lb., 35c.

We will supply 5 lbs. or more of Klein Wanzleben, Vilmorin's Improved and French Very Rich Sugar Beets at 25 cents per pound, by express or freight, at purchaser's expense.

Beets for Stock Feed.

Mangel Wurzel An ever increasing acreage is being planted to stock beets, because of the wonderful results by feeding them as shown by the reports of our experiment stations, and leading farmers and stockmen. Fattening, breeding and milk cattle do equally well on them. With dairy cattle, the flow of the milk is largely increased. About one-fourth of the dairy ration should be of roots. Hog cholera is prevented by their use. Sow in rows 2½ to 3 feet apart as soon as the ground can be thoroughly worked. Cover seed about 1 1-2 inch, making ground firm over the seed. Thin to eight inches apart, when four inches high. Where many are grown a good drill and cultivator are needed. 5 pounds sows an acre. Decidedly a monstrous size beet and of regular shape and quality nutritious, and valuable as a stock food; blood-red color, very smooth and decidedly improved strain of Mangels. Plant from first of April up to last of June. A good root-crop is essential from which to realize a good profit. Pkt., 4c; 1-4 lb., 10c; 1-2 lb., 15c; lb., 25c; 5 lbs., \$1.00.

Imperial Sugar This is a larger, coarser beet than



the French White Sugar. It is more like Mangel Wurzel in character, but the white flesh is much sweeter and tenderer. It is sometimes used for the table. Pkt., 5c; oz., 10c; 1-4 lb., 15c; lb., 35c.

Beets=continued

Golden Tankard Best for dairy farming. Considered indispensable among English dairy farmers; it is stated by them they are able to obtain a higher price for milk when feeding cows on Golden Tankard. Sheep thrive on it. Other mangels cut white, circled with yellow, but Golden Tankard is of a rich, deep yellow throughout. Early, hardy and a heavy cropper, for on account of its shape the roots can be left standing close in rows. Per pkt., 5c; oz., 10c; 1-4 lb., 15c; 1 lb., 25c; by express, not prepaid, 5 lbs., \$1.50.

French Yellow Sugar Grows to a large size; roots half long, yellow and sweet. Excellent for stock feeding. Pkt., 5c; oz., 10c; 1-4 lb., 15c; 1 lb., 40c.

C a b b a g e .

One ounce of seed will produce about 3,000 plants. Set 8,000 to 10,000 plants to the acre of the early sorts and 9,000 of the large, late kinds.

We pride ourselves on having the best, purest and highest grade of cabbage seed that is offered, or at least it is surpassed by none. Compared with the cost of seed, there is more money in growing cabbage than any other crop and there is nothing that growers should be more particular about.

The cabbage requires a deep, rich soil and thorough working to insure good, solid, full-sized heads. Sow early sorts in hot-beds in February or March, or in open ground as soon as it can be worked. Later or winter crops in May or June, in shallow drills six inches apart. When the plants are four inches high transplant into richly manured ground, the early kinds two feet apart. The fall and winter varieties three feet apart. Packets contain about 800 seed. Slug Shot and tobacco dust are used to kill insects and worms.



Early Jersey Wakefields.

The earliest and hardest heading of extra early cabbages. Our seed is new and good. Heads conical, very compact, solid and of excellent quality. The thick, stout leaves and compact habit make it the best for wintering over and very early setting. Pkt., 5c; oz., 10c; 1-4 lb., 15c; 1 lb., 40c.

Early York Heads small, heart shaped firm and tender; of very erect and dwarf habit, so that they may be grown fifteen or eighteen inches apart. Pkt., 5c; oz., 10c; 1-4 lb., 15c; 1 lb., 40c.

Early Winnigstadt.

One of the best for general use, being very hardy and sure to head forming a hard head when most sorts fail. Those who have failed with other kinds can hope to succeed with this. It seems to suffer less from the cabbage worm than

any other sort. Plant very compact, with short, thick leaves. Heads regular, conical, very hard, and keep well both summer and winter. It is the hardiest, not only regards frost, but will suffer less from excessive wet, drought, insects or disease, than any other second early sort, and will give a fair crop of heads when others fail. Pkt., 5c; oz., 10c; 1-4 lb., 15c; 1 lb., 40c.

All Seasons This is generally grown on Long Island for the New York market. Heads very large, round, often nearly spherical, but usually somewhat flattened; very solid and of the best quality, keeping as well as the winter sorts. Plants very vigorous and sure heading; leaves large, smooth, with dense bloom. Remarkable for its ability to stand the hot sun and dry weather. Our trial has shown that heads which were fit for market by July 10th were still salable September 10th, the only change being increased size and density. One of the very best sorts for general cultivation. Pkt., 5c; oz., 10c; 1-4 lb., 15c; 1 lb., 40c.

Henderson's Early Summer Ten or twelve days later than the Jersey Wakefield, but much larger in size and will stand on the ground much longer without bursting open. Pkt., 5c; oz., 10c; 1-4 lb., 15c; 1 lb., 40c.

Cabbage--Continued



PREMIUM Flat Dutch—The best ever offered the American cabbage. Nine hundred ninety-nine out of 1,000 averaging 16 to 20 pounds, measuring 12 to 14 inches in diameter. Specially grown heads often reach 50 white, compact and crisp. Unflavor especially fine. It is without in the world. It will flourish on all lb., 50c; 1-2 lb., 90c; lb., \$1.60. The land need have no doubts about

Premium Flat Dutch cabbage grower. Absolutely sure headings, plants make perfect salable heads, ing 12 to 14 inches in diameter. pounds each. Interior is creamy equaled for cooking or slicing; exception the best winter keeps soils. Price—Pkt., 5c; oz., 15c; 1-4 most critical cabbage grower in the quality of our cabbage seed.

Early Dwarf Flat Dutch

Has succeeded admirably on account of its ability to resist the heat; it never flaws under the severest sun; it produces very fine, large heads after the earliest sorts have disappeared. We recommend it highly. Pkt., 5c; oz., 20c; 1-4 lb., 65c; lb., \$2.00.

IF YOU WISH TO HAVE A GOOD SUPPLY OF SAUER KRAUT NEXT WINTER. PLANT RATEKINS' FAMOUS CABBAGE SEEDS.

Culture

The requisites of complete success are: First, good seed; this plant is largely dependent upon the best seed for its success; no satisfactory results can possibly be obtained from poor stock. Second, rich, well prepared ground, third, frequent and thorough cultivation. A heavy, moist and rich loam is most suitable. It should be highly manured and worked deep.

Autumn King

Autumn King is an entirely distinct variety; best keeper we have ever seen; it produces enormous solid heads of that dark shade of green that is most desirable in a cabbage, and has such small outer leaves that it can be planted closer together than the ordinary late sorts, and can be relied on to produce a greater weight of crop per acre than any other variety. A distinct feature of the Autumn King is the peculiarly crimped leaves, which not only adds to its appearance, but enables it to be distinguished anywhere. It is unquestionably one of the best late sorts of today. Pkt., 5c; oz., 20c; 1-4 lb., 70c; lb., \$2.00.

Buying Vegetable Seeds by Mail

It is the easiest, most pleasant and profitable way to secure the best seeds if you select a reliable firm. If your merchant handles bulk seeds he must have a large profit and often holds over quite a bit. Commission seeds and boxes left at stores are a snare and a delusion and the chances are that you get stuff so old that it will prove worse than useless and you throw away your time and money in planting them. If you once try the mail order buying seeds, you will certainly be pleased and ready each season to send us an order for your full supply of seeds. As for farm seeds there is no doubt you can do much better than to buy of your merchant, as you are enabled to buy of us wholesale and get what it is impossible for many merchants to handle. Something rare and profitable to you. Let us prove it to you.



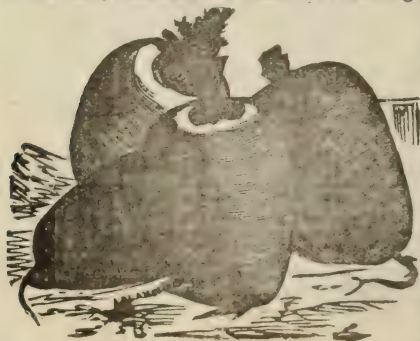
Ratekins' Ideal Cabbage

As now improved, the most profitable cabbage ever offered to the American cabbage grower. Absolutely sure heading. 900 out of 1,000 plants make perfect, salable heads averaging 16 to 20 pounds; interior is creamy white, compact and crisp, unequalled for cooking or slicing; flavor especially fine. It is, without exception, the best winter keeper in the world. It will flourish on all soils, in fact, it will prove a gold mine to all cabbage growers. Over twenty thousand pleased customers pronounce this the most wonderful of all late cabbage. The illustration of our field of Ratekins' Ideal will give you only a faint idea of the profits derived from the King of all cabbages. We don't ask you \$4 or \$5 a pound, although well worth \$4, compared with the strains sold by other seedsmen at \$2 to \$3 a pound. We want every one of our customers to give it a trial this season; the seed from these we offer you cannot be equalled. Pkt., 10c; oz., 25c; 1-4 lb., 80c; 1-2 lb., \$1.50; lb., \$2.75; postpaid.

We regret for lack of space we cannot say more about this wonderful cabbage.

CARROTS

The carrot is one of the most wholesome and nutritious of our garden roots and deserves to be more extensively used, both for culinary and stock feeding purposes. We urge our readers to give some of the early table sorts a trial. For feeding stock, especially horses and milch cows, the carrot cannot be surpassed; and it should be more largely grown by farmers for this purpose.



The Oxheart.

Culture—While a sandy loam made rich by manuring the previous year is the best soil for the carrot, any good land if thoroughly and deeply worked, will produce satisfactory crops. When it is possible to do so, it is advisable to sow as early in the spring as the ground is fit to work, though good crops may, in this latitude, be grown from sowings as late as June 15, but success from such late planting is uncertain. For table use sow the smaller kinds as early as practicable in rows 16 to 18 inches apart. For field culture prepare the ground thoroughly and sow in drills 18 to 24 inches apart, using from one and one-half to three pounds to the acre, according to the distance between the rows. Cover one-half to one inch deep and see to it that the soil is pressed firmly above the seed. As soon as the plants appear, use the cultivator or wheel hoe. Do not let the weeds get a start. Thin the smaller table sorts to 8 to 10 to a foot, and the field varieties to 3 to 6 inches apart in the row. For winter use gather and store like beets or turnips.

Oxheart We do not hesitate to call this the most valuable variety in existence. It is inter-

mediate between the Half-Long and Horn varieties, attaining a diameter of 3 to 4 inches at the neck, of beautiful shape and rich orange color. Where other varieties require digging it is easily pulled. It will produce roots as early as any variety and continues of the best quality all the season. It is excellent for hogs and other live stock and has yielded 1,200 bushels per acre. Cut off tops with scythe and pull roots with potato hooks. Pkt. 5c, oz. 10c, 1-4 lb. 25c, lb. 70c.

Early Scarlet Horn One of the most popular varieties grown, color deep orange; one of the best for table use. Price, pkt 5c, oz. 10c, 2 oz. 15c, 1-4 lb. 20c, lb. 60c.

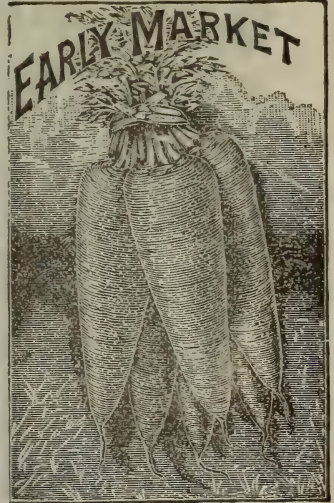


Danvers

Is in form about midway between the Long Orange and Shorthorn class, growing generally with a stump root. It is of a rich, dark orange color, grows to a large size, is smooth, and the flesh very close in texture with little core. It is a first-class carrot for all soils. Pkt. 5c, oz. 10c, 1-4 lb. 20c, lb. 65c.

Early Market

Stump rooted, grows about the size of our Cincinnati Market Radish, excellent forcer; fine flavor; flesh deep orange, fine grained. Pkt. 5c, oz. 10c, 1-4 lb. 25c, lb. 85c.



CAULIFLOWER



HENDERSON'S EARLY SNOWBALL CAULIFLOWER.

Early Snowball

Admirably adapted for forcing or wintering over for early crop and the most popular sort for these purposes. It is also one of the best sorts for late summer and fall crop and with reasonably favorable conditions every plant will form a large solid head of fine quality. The plants are compact with few narrow, upright leaves and are well suited for close planting. The heads are solid, compact, round, very white and curd like and are developed earlier than those of any other sort. We know our stock of this variety is unsurpassed and is superior to much that is sold under such names as "Gilt Edge," "Earliest" etc. Pkt. 15c, 1-4 oz. 75c, oz. \$2.50.

CELERY One Ounce Will Produce About 6,000 Plants.



This we consider one of the luxuries of the garden. For first crop sow the seed early in hot beds, or in boxes in the house, in rich, moist soil, covering the seed very lightly. For main crop sow seed in open ground in April or as soon as the soil is in good condition. Seed germinates slowly and if weather is hot and dry protect with light covering of hay or straw. Stir soil as soon as plants are well up; thin out and transplant so that they stand about an inch apart in the row. If they grow too rapidly shear the tops off when about 4 or 5 inches high and this will make them more stocky. For main crop set plants out between June 15th and July 15th in rows three feet apart and the plants six inches apart in the row. Care should be exercised to firm the earth well around plants when setting and they will root better. Keep clear of weeds until about the middle of August, when it will be time to begin earthing up. Draw the soil up against the plants with a hoe as closely as possible, firming it enough to keep plants in an upright position. Later in the season the blanching process must be finished by digging the soil from between the rows and banking it clear to the tops on each side of the row of celery. Much labor is saved by growing the self-blanching varieties, but they do not keep quite as well for winter use.

Golden Self-Blanching

This is by far the most popular variety now on the market. It is of medium earliness, of dwarf, compact habit, with thick, solid, heavily ribbed stalks, which blanch easily to a clear waxen yellow. When grown in rich, moist soil, the stalks are numerous and large with a solid

heart of beautiful yellow. The best grade seed is scarce this year.

Pkt. 5c, oz. 30c, 1-4 lb. 90c, lb. \$3.00



Celery==Continued

Henderson's Half Dwarf Entirely solid, possessing a rich nutty flavor, while it has much vigor of growth and heavy bunch. Per pkt. 5c, oz. 15c, 1-4 lb. 45c, lb. \$1.50.

White Plume Stalks, portions of the inner leaves, and heart naturally white and become fit for use by simply tying it up closely with soft twine. More used than any other variety by market gardeners. Our seed is of the highest quality and sure to please all. Pkt. 5c, oz. 15c, 1-4 lb. 50c, lb. \$1.50.

Giant Pascal Stalks remarkably large, thick, solid, entirely stringless, very crisp and brittle. A vigorous grower and is self-blanching, clear white. Pkt. 5c, oz. 20c, 1-4 lb. 60c, lb. \$1.75.

Golden Dwarf Waxy golden yellow, cylindrical, solid, crisp. Pkt. 5c, oz. 15c, 1-4 lb. 40c, lb. \$1.25.

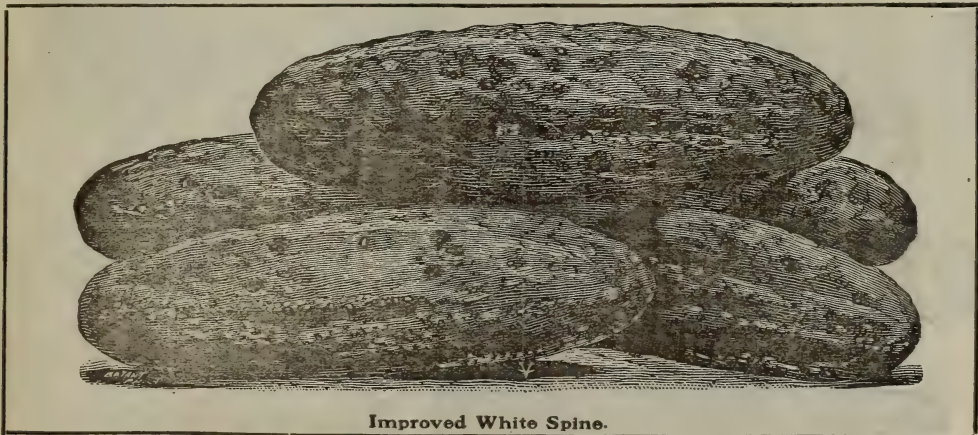
Honest Descriptions We have made it a point to give honest and true descriptions of our seeds and to so describe and explain them that there will not be any misunderstanding and disappointments whatever, and when the seeds you order arrive they will surprise you by being better than you expected—as a great many told us last season in their kind letters to us—you will thank us for our true descriptions. We believe that there are too many fancy pen pictures and exaggerations in the descriptions and showing up the quality of the seed in many seed catalogues. These exaggerations have destroyed the confidence of the public to a great degree, many vowing that seed men were all liars and they would not patronize them again. We believe that honest descriptions and true statements that can be backed up every time will win out in the end.

Cucumbers

One Ounce will plant 50 hills; two ounces will plant one acre.

Cucumbers succeed best in a rich, loamy soil. For first early, sow in hot beds, in berry boxes, or in small flower pots, six weeks before they can be set out in open ground. When danger of frost is over transplant in hills four feet apart each way. For general crop plant in open ground in May, about twelve seeds in a hill. When danger of bugs is past thin to four strong plants in a hill. For pickling, plant in June. Sprinkle the vines with plaster or air-slacked lime to protect from bugs, or use Slug Shot to kill the bugs.

Early Cluster Vine vigorous, producing the bulk of the crop near the root and in clusters. Fruit short, with uniformly thick end, dark green, but paler at blossom end. A very productive sort. Pkt. 5c, oz. 10c, 2 oz. 15c, 1-4 lb. 20c, lb. 50c.



Improved White Spine.

Improved White Spine One of the best sorts for table use. Vines vigorous, fruiting early and abundantly; fruit uniformly straight and handsome, dark green, with a few white spines; flesh tender and of excellent flavor. In this country this variety is used more, perhaps, than any other for forcing under glass. Pkt. 5c, oz. 10c, 2 oz. 15c, 1-4 lb. 20c, lb. 50c.

Improved Long Green A standard sort. Vine vigorous and productive, forming fruit fit for the table nearly as early as the shorter sorts; fruit about four inches long, firm and crisp. The young fruit makes one of the best of pickles, and when ripe is the best of any for veal pickles. Per pkt. 5c, oz. 10c, 1-4 lb. 20c, lb. 60c.

Cucumbers=Continued



Improved Chicago Pickle.

Improved Chicago Pickle

This variety which originated with a leading pickle grower near Chicago, is considered the best variety there as it is very prolific, matures early and produces an immense number of desirable shaped pickles. Per pkt. 5c, oz. 10c, 1-4 lb. 20c, lb. 60c.

Boston or Jersey Pickle

Is used almost exclusively by the market gardeners near Boston for pickling. Pkt. 5c, oz. 10c, 1-4 lb. 20c, lb. 50c.

Fordhook Pickling

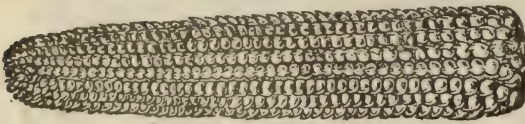
A very small, oval prickly variety, quite distinct from all others. It is grown exclusively for pickles; is the smallest of all varieties, and should always be picked when young and tender. The seed is slow to germinate, requiring usually from two to three weeks. Pkt. 5c, oz. 10c, 2 oz. 15c, 1-4 lb. 25c, lb. 80c.



POP CORN



QUEEN'S GOLDEN.



MONARCH WHITE, RICE.

White Rice

A very handsome and prolific variety; ears short; kernels long, pointed, and resemble rice; color white. Probably no variety of pop corn is superior to this for parching. We supply lots of four quarts and less, shelled. Pkt. 5c, pt. 10c, qt. 15c, 4 qts 30c.

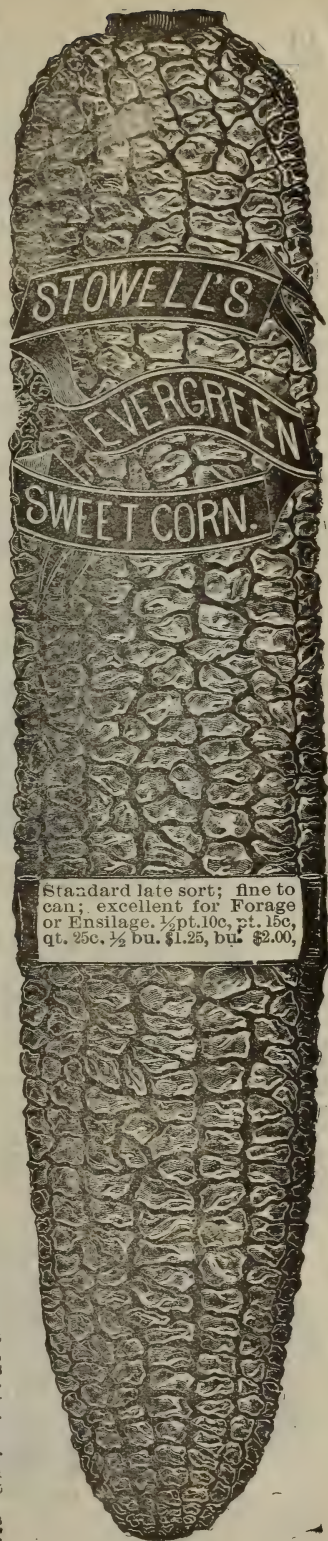
If corn is wanted by mail or express prepaid, add 10 cents per pint, 15 cents per quart for charges.

Queen's Golden

Color a peculiar lustrous golden yellow; pops to a rich cream color; very prolific. Pkt. 5c, pt. 10c, qt. 15c.

Don't Forget to Include a Few Pounds of Our Pop Con in Your Order

SWEET OR SUGAR CORN



Standard late sort; fine to can; excellent for Forage or Ensilage. $\frac{1}{2}$ pt. 10c, pt. 15c, qt. 25c, $\frac{1}{2}$ bu. \$1.25, bu. \$2.00.

Mammoth White Cory The largest and best extra early Sweet Corn. The stalks are no larger than those of the White Cob Cory, but each stalk furnishes two or more large, fine shaped ears which are fit for use before those of any other sort. The ears are twelve-rowed, very symmetrical and handsome, with no opening between the rows at the base. The grain is large, broad, very white and of remarkably good quality for such an early sort. The beauty and quality of this variety give it ready sale even when the market is overstocked. Pkt. 10c, pt. 15c, qt. 20c, 4 qts. 60c.

White Cob Cory The plants are usually about four feet high and bear two or even three ears which are eight-rowed with large, somewhat coarse but very sweet and tender grain. Pkt. 10c, pt. 15c, qt. 20c, 4 qts. 60c.

Early Minnesota A standard early variety that has held a high place in the list of

Sweet or Sugar Corn=Continued

sweet corns ever since its introduction. The ears are of good size, well flavored and of the best cooking qualities. Valuable for either private or market use. Per pkt. 5c, $\frac{1}{2}$ pt. 10c, qt. 35c; by express $\frac{1}{2}$ pk. 50c, pk. 80c.

Crosby's Early For medium early use and general crop this is one of the most desirable varieties. Ears are of medium size and the cooking qualities excellent. A good cropper and profitable for family use and as a market sort. Pkt. 5c, $\frac{1}{2}$ pt. 10c, qt. 35c. By express $\frac{1}{2}$ pk. 50c, pk. 85c.



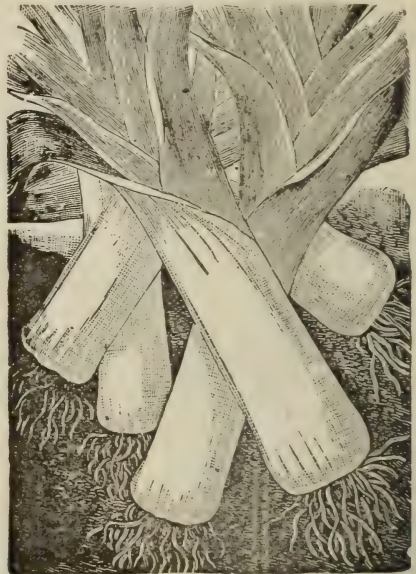
Early Round Purple.

Egg Plant

A tender plant, which should be started quite early in a hotbed or box in the house which must be kept warm. Transplant late to open ground $2\frac{1}{4}$ feet apart.

Early Round Purple.

The earliest variety in existence, being several weeks earlier than most others. Fruit is exactly the same shape and color as the Improved New York Purple, but is somewhat smaller. It is fully equal in quality, and what it lacks in size is made up in productiveness. Pkt. 5c, oz. 35c, $\frac{1}{4}$ lb. \$1.10.

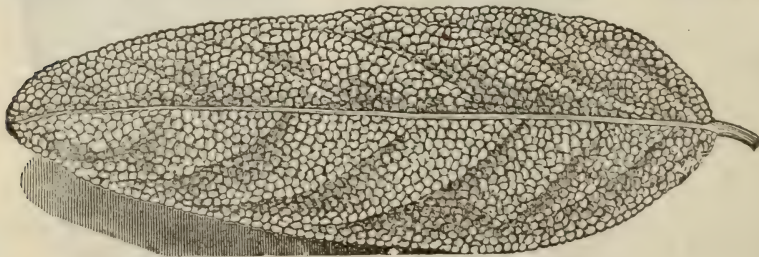


London Flag Leek.

LEEK

Belongs to the onion family and by some preferred to that vegetable. Sow the seed and care for young plants same as for onions, but they need a little more room in order to develop more fully. When the young plants are double the size of a goose quill, transplant to a prepared bed in rows one foot apart and four or five inches in the row.

London Flag This variety is more cultivated in this country than any other. It is hardy and of good quality. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 30c, lb. \$1.00.



HOLT'S MAMMOTH SAGE.—(Average size leaf.)

SAGE.

A few ounces of sage will plant enough for three hundred bunches of dry leaves. At Shenandoah it retails at 5c a bunch. An ounce of seed will furnish enough plants to sell \$10 or \$15 worth of dried leaves in our market. Pkt. 5c, oz. 20c, lb. \$1.25.

KALE

Borecole, Kale and German Greens are general terms applied to those classes of cabbages that do not form heads, but are used in their open growth. Some of the varieties are the most tender and delicate of any of the cabbage tribe. They are hardy and are not injured by the frost.



TALL GREEN CURLED SCOTCH KALE.

Tall Green Curled Scotch This is very hardy and is not injured by a moderate frost. About thirty inches tall, with an abundance of dark green leaves, which are densely curled and cut, forming a very beautiful plant. It stands the winters in the middle states without any protection. Pkt. 5c, oz. 10c, 2 oz. 15c, 1/4 lb. 25c, 1b. 75c.

Dwarf Green Curled Kale.

Plant low and compact, but with large leaves curled, cut and crimped until the whole plant resembles a bunch of moss. It would be well worthy of cultivation simply for its beauty. One of



Dwarf Green Curled Kale.

the best sorts for use, and when well grown and cooked is one of the most palatable of vegetables. Pkt. 5c, oz. 10c, 1/4 lb. 20c, 1b. 75c.

KOHL RABI

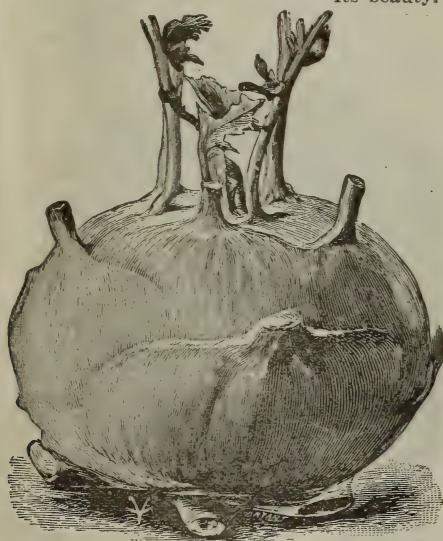
Culture—Sow in light, rich soil, as early as possible, in drills sixteen inches apart, and when well established, thin to six inches apart in the row. One or two plantings at intervals of ten days will give a succession until hot weather, when they fail to grow well, but plantings may be made the latter part of July for fall use.

Early Purple Vienna Nearly like the last except in color. This is a bright purple. The leaf stems are tinged with purple. Pkt. 5c, oz. 30c, 2 oz. 55c, 1/4 lb. \$1.00, 1b. \$2.75.

HORSE RADISH

The best Horse Radish is produced from small pieces of roots four or five inches in length. These small roots will produce good radish fit for use in one season's growth. Plant the set small end down, where the slanting cut is, so that the top will be two inches under the soil. The soil should be very rich and well cultivated. It is hardy and may be left in the ground until spring before digging. A part of the crop may be pitted late in the fall if desired. A dozen roots will give all that will be needed for family use; as it constantly increases, it is best to plant in some out-of-the-way corner of the garden. A very profitable crop for market gardeners to grow. By mail, (postpaid) 5 cents each; dozen, 25c; 50 for 60c; 100 for 90c. By express (not paid) 100 for 75c; 300 for \$2.00; 500 for \$3.00.

Prices for 1,000 and upwards given on application.



SHORT-LEAVED EARLY ERFURT KOHLRABI

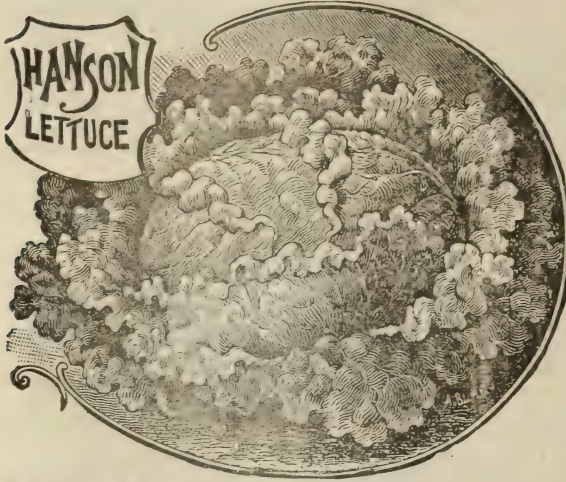
LETTUCE.

One Ounce Will Sow 120 Feet of Drill.

Probably no vegetable is more universally used than Lettuce, and to be thoroughly appreciated it must be brought to the table fresh and unwilted. The quality of lettuce depends largely upon a rapid and vigorous growth. Sow in hotbed in March and in open ground as early as it can be worked, thinly in drills one foot apart. For a succession sow every three weeks during the season. The soil should be rich and mellow. Thin out plants as they grow.

Early Prize Head It forms a mammoth head, and remains tender and crisp throughout the season; is prompt to head but slow to seed; of superior flavor and very hard. Leaves of dark, reddish brown color variegated with dark green. It is an immensely popular variety. Pkt. 4c, oz. 10c, 1/4 lb. 25c, 1b. 75c.

Lettuce--Continued



Improved Hanson.

For general use for market and gardeners we are sure that no variety can surpass our Improved Hanson lettuce. Deliciously sweet, crisp and tender, and almost absolutely free from any rank or bitter taste. Resists the summer heat extremely well. It cannot be too highly praised. Price pkt. 4c, oz. 10c, $\frac{1}{4}$ lb. 25c.

California Cream Butter.

A variety of Cabbage Lettuce, with round solid heads. Outside of heads are of a medium green, slightly marked with small brown spots; within, the leaves are of a very rich, cream yellow color, most refreshing in appearance, and particularly rich and buttery to the taste. The heads are of a very good size, compact, very hard and solid. It is medium early and one of the very best summer varieties of head lettuce we have ever seen. Price, pkt. 4c, oz. 10c, $\frac{1}{4}$ lb. 25c, lb. 75c.

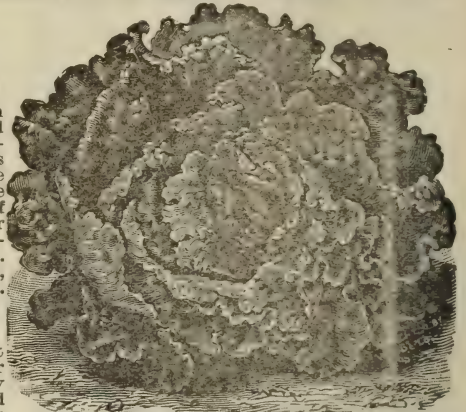
Early Curled Simpson

$\frac{1}{4}$ lb. 25c, lb. 75c.

An improved variety of the Curled Simpson, with large, loose heads and excellent flavor. Price, pkt. 4c, oz. 10c,

Black Seeded Simpson

It is much lighter colored than preceeding; it grows nearly double in size, of fine quality. One of the best for forcing or outdoor planting. Pkt. 4c, oz. 10c, $\frac{1}{4}$ lb. 25c, lb. 75c.



Black Seeded Simpson.

Selesia

An excellent spring, summer and fall variety forming good sized heads that stand

Early Curled Simpson.

drouth and heat longer without injury than any other sort; matures very early. Per pkt. 4c, oz. 10c, $\frac{1}{4}$ lb. 25c, lb. 75c.

Salamander

(Seed Black). A very bright green and attractive variety. It forms large, solid heads, composed of thick, smooth, very tender leaves, the inner ones finely blanched and all of finest quality. It remains a long time in head before running to seed. Pkt. 4c, oz. 10c, $\frac{1}{4}$ lb. 25c, lb. 80c.

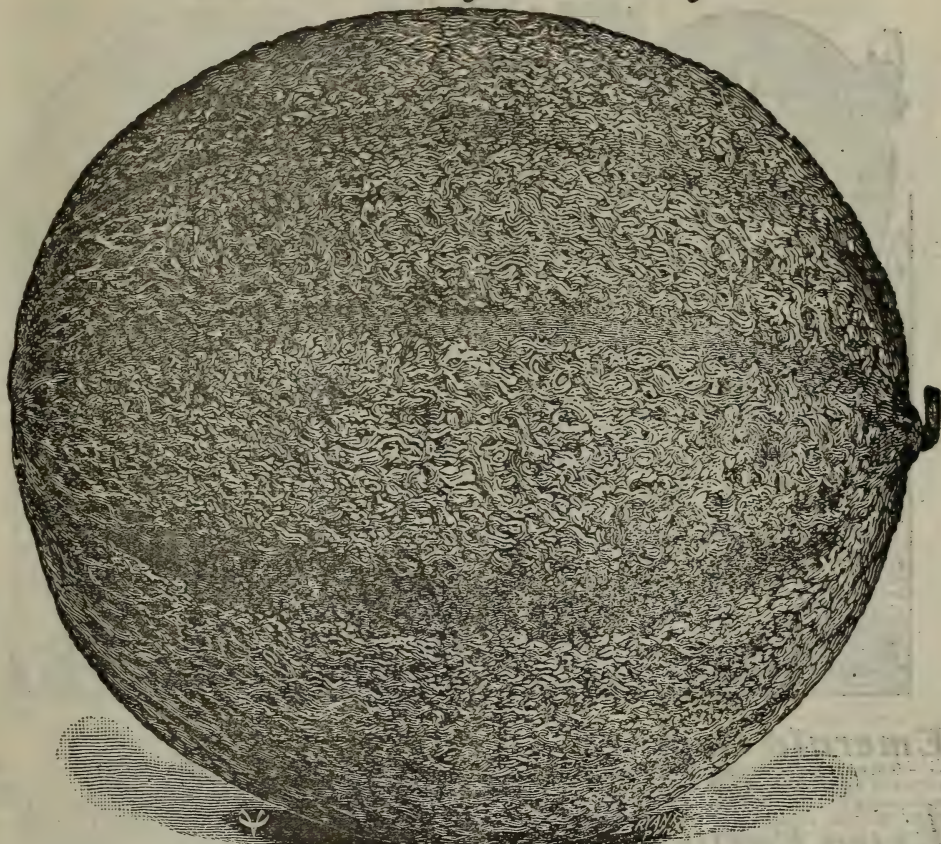
Brown Dutch

(Seed Black). An old sort noted for its hardness. Leaves large, thick, green, tinged with brown. It always forms a large, solid head which is somewhat coarse looking, but the inner leaves are beautifully blanched, exceedingly sweet, tender and well flavored. Desirable because of its hardness and fine quality. Pkt. 4c, oz. 10c, $\frac{1}{4}$ lb. 25c, lb. 80c.

It Pays to Buy Reliable Seeds

above all else. They cannot be bought at half price. Good seed lay the foundation for a good and perfect crop, and they cannot be produced or sold at half price. Cheap seeds are dear at any price, even as a gift. If you are acquainted with the cost of production and the market value of high grade seeds, an examination of this book will show that seeds of equal quality cannot be had anywhere at lower prices. In our extensive business it is our constant aim to please and satisfy every customer, and no one can do it with cheap and inferior seeds.

MUSK-MELON



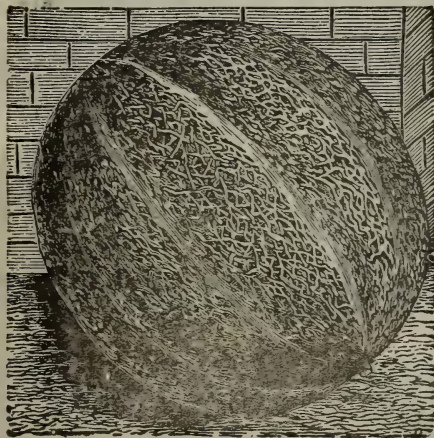
ROCKY FORD.

One Ounce will plant about 80 hills; two lbs. to the acre.

The soil best adapted to the culture of melons is a warm, rich, sandy loam. Plant in hills five or six feet apart each way, ten or twelve seeds in a hill. When they begin to vine thin out, leaving only four of the most thrifty. As melons are very sensitive to the cold; they should not be planted until the settled warm weather begins—in this latitude about the middle of May. Cultivation should begin as soon as the plants appear above the ground, and be kept up once a week until the vines interfere too much. You will be pleased with our melon seed.

Rocky Ford This new variety has everywhere been in great demand by the high class hotels and restaurants. Hundreds of carloads of them have been shipped from the little town of Rocky Ford, Colorado, to Chicago, St. Louis, New Orleans, Philadelphia, Newport, Boston and other cities, driving out the home grown. The melons are of just the right size for table use, slightly oval in shape. The flesh is thick, of a light green color and a fine, juicy, luscious flavor. It is very early, and is wonderfully productive. Pkt. 4c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 65c.

Nutmeg Improved strain of the old well known standard market and family sort. Large, tender, sweet and juicy. Green core and a rich, highly delicious flavor. Very productive, and is preferred by some people. Pkt. 4c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 60c.



Musk Melons==Continued



Emerald Gem

This is one of the most delicious little melons that we have ever eaten. The flesh is thick, of a suffused salmon color, almost red, and ripens thoroughly to the extremely thin, green rind. It is peculiarly crystalline in appearance, juicy and rich. The flavor is sweet and luscious beyond description. Rather small for marketing but very nice for home use. Pkt. 4c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 60c.

Extra Early Hackensack

We offer under this name a very distinct stock, different and much superior to that often sold as Extra Early Hackensack. The fruit is medium sized, nearly round with deep ribs and very coarse netting. The flesh is green, a little coarse but very juicy and sweet. Pkt. 4c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 60c.

OSAGE

One of the best melons on the market for family use and also greatly liked by gardeners. The skin is thin, of dark green color and slightly netted. The flesh is salmon color, remarkably sweet and spicy in flavor, extremely thick and delicious to the rind. The seed cavity is very small. It is seldom that one of poor quality is found. The whole crop is very even and extra heavy owing to the thickness of the meat. All lovers of fine melons should try the Osage. Pkt. 4c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 60c.

PAUL ROSE

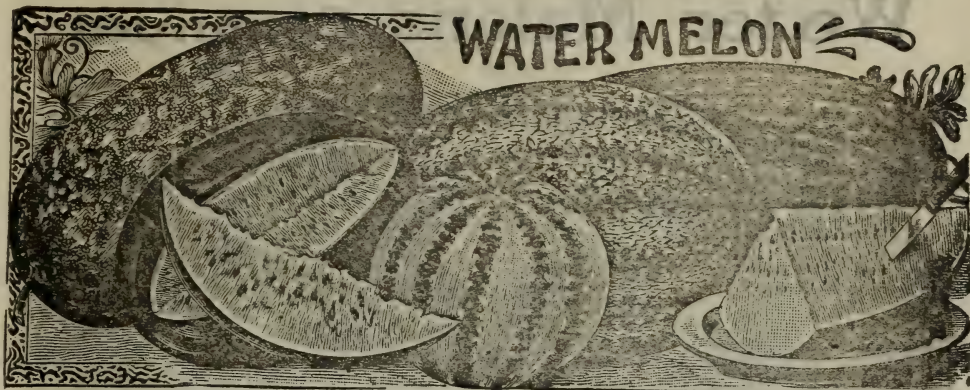
We have been greatly pleased with this new variety, and we consider it one of the finest sorts. It is the result of a cross of the Osage and Netted Gem, and it combines the sweetness and high flavor of the former with the fine netting and superior shipping qualities of the Netted Gem. It is peculiarly sweet, rich, delicious flavor and a long keeper. If you are a gardener plant it and catch top of market prices. Pkt. 4c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 60c.

Improved Cantaloupe

A finely improved variety, often weighing from 15 to 20 pounds. The flesh is thick, light in color and of fine quality. Quite early and a splendid keeper. Include this variety in your order. Price pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 60c.

Ratekin's Early Market

Many years were spent in perfecting this decidedly distinct and beautiful melon. A most valuable characteristic is its close, strong netting. Its vigorous growth gives it great hardiness and ability to withstand drouth, blight and bugs. Its beautiful shape and handsome appearance are remarked upon when placed side by side on the market bench or counter with any of the popular sorts of the day. It ripens only a few days after Extra Early Hackensack, is more prolific, more uniform, bears longer, and the fruit is more solid; seldom bursts at blossom end; flavor and quality are all that can be desired. It is green fleshed, with small seed cavity. A valuable sort for a general crop. Pkt. 4c, oz. 10c, 1-4 lb. 20c, lb. 60c.

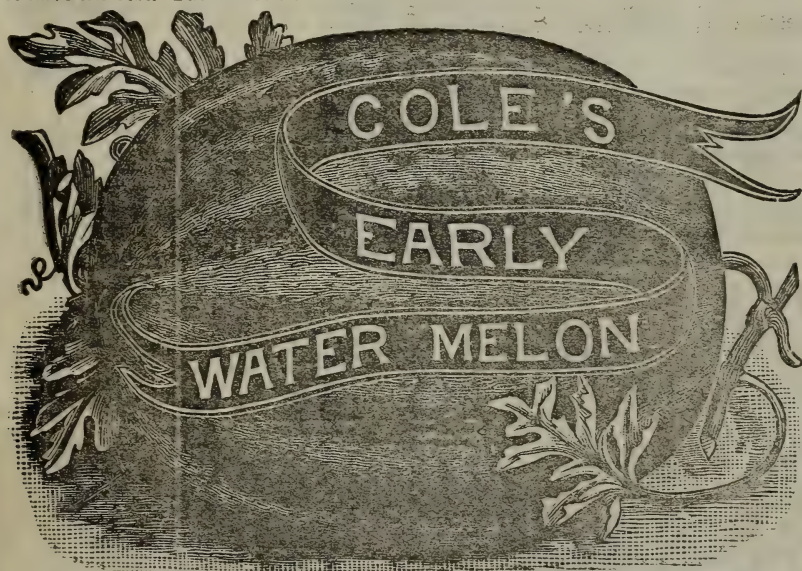


WATER MELON

Water Melon

One ounce is required for forty hills; three will plant an acre.

A light, sandy soil, with good exposure to the sun, is the best for watermelons. It should be prepared deep, but receive shallow cultivation. Hoe often and thoroughly. Plant in hills eight to ten feet apart each way. Plant eight to ten seeds in a hill, and finally, when danger of insects is past, leave but three strong plants. Thousands of melon growers annually depend on us for their seeds and are universally pleased, claiming that nowhere have they ever obtained seed so pure and reliable. It pays to have the best. Packets contain about 100 seeds.



Cole's Early

Decidedly the finest early variety for the private garden but is too brittle for long shipments. It is very early and will mature further north than most other sorts. Of medium size, very productive, continuing to bear throughout the season. Flesh of bright red color, of granulated, sparkling appearance. In flavor it is lusciously sweet and refreshing. Pkt. 4c, oz. 8c, $\frac{1}{4}$ lb. 15c, lb. 45c.

Phinney's Early

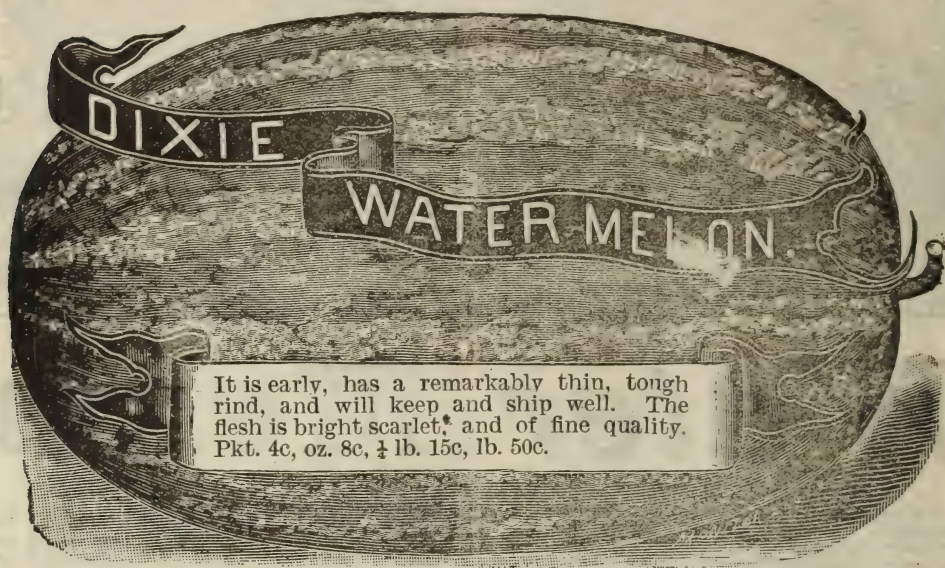
Early, medium size, and quite productive. Pkt. 4c, oz. 8c, $\frac{1}{4}$ lb. 15c, lb. 50c.

Mountain Sweet The old standard. Best quality. Pkt. 4c, oz. 8c, $\frac{1}{4}$ lb. 15c, lb. 50c.

Sweet Heart Water Melon This melon is early, large, handsome, heavy and productive. Shape is oval; color mottled light to very dark green. Flesh bright red, solid, tender and very sweet. Pkt. 4c, oz. 8c, $\frac{1}{4}$ lb. 15c, lb. 45c.

Don't fail to include in your order several varieties of our Melon Seed. There's lot of money in growing melons for the market.

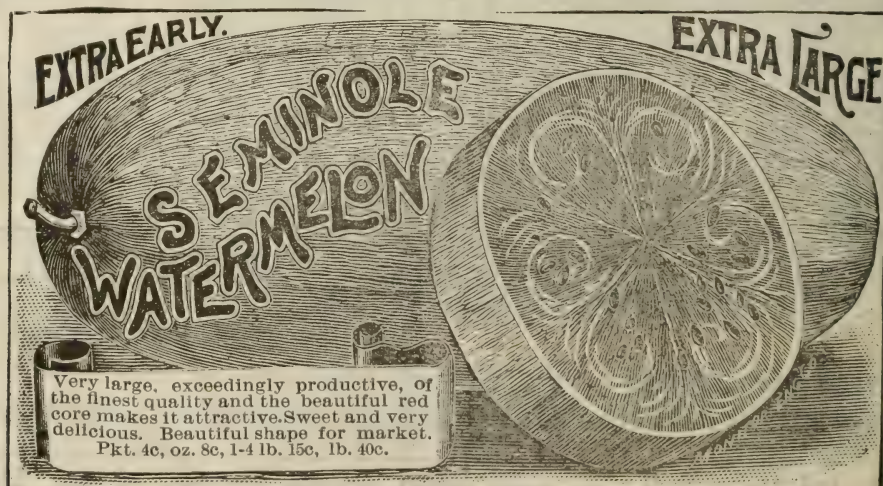
Water Melons--Continued



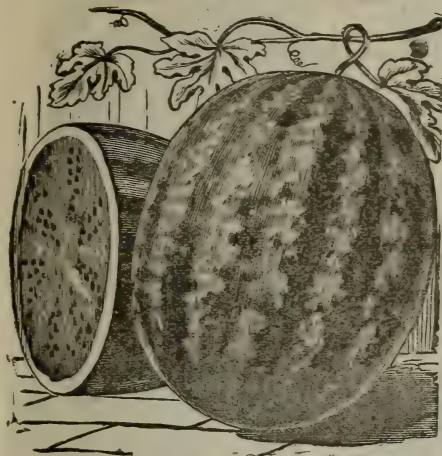
Cuban Queen This is a large variety, often weighing 80 lbs. and upward; striped light and dark green; an enormous cropper. Pkt. 4c, oz. 8c, 1/4 lb. 15c, lb. 4c.

Black Diamond One of the largest and best ~~surpassers~~ yet produced. A quick seller, and fine for home market and family gardens. It has beautiful red core, and sweet and delicious. Pkt. 4c, oz. 8c, 1-4 lb. 15c, lb. 45c.

Peerless or Ice Cream The great home market melon. This old stand-by is our best general cropper for the home market; has too thin a rind for shipping unless packed in straw. We have sold it for many years to our most extensive Nishna Valley growers, for whom it brings highest prices, and meets with ready sale regardless of other varieties that may be on market, because it has become a great favorite with market gardeners and melon dealers and consumers. Few, if any, surpass a **True Ice Cream** for quality and productiveness. Medium early, fruit oblong, large size; rind light mottled green; flesh bright scarlet, solid to the center, melting and delicious. Pkt. 4c, oz. 8c, lb. 55c, 3 lbs. for \$1.50.



Water Melons--Continued



Kolb's Gem,

Kolb's Gem This variety, on account of its excellent shipping qualities, is extensively grown for that purpose. Grow nearly round, and the color is a dark green with lighter narrow stripes. Very thin and tough rind. Flesh bright red and of good flavor. Our seed is choice. Pkt. 4c, oz. 8c, 1-4 lb. 15c, 1b. 45c.

Kleckley's Sweet Large oblong melon. The skin is dark green, flesh bright scarlet, the rind only about one-half inch in thickness. The scarlet flesh is sweet and sugary and is of such texture that it leaves no strings of pulp whatever in eating. The melon is better for home use than for shipping and we believe it is the **Best Table Melon Today**. Pkt. 5c, oz. 10c, 1-4 lb. 20c, 1b. 60c; by express, 1b. 60c, 5 lbs. \$2.50.

McIver Wonderful Sugar—

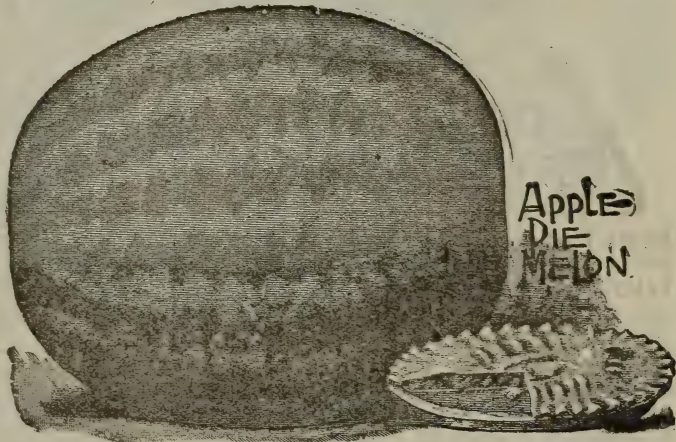
A large, oblong melon of handsome appearance; skin shows broad bands of white, with narrower ones of green. Its soft pink flesh is crisp, juicy, very sweet and solid to the center. Pkt. 4c, oz. 10c, 1-4 lb. 20c 1b. 60c.

Apple Pie

Grows uniformly round and smooth, striped and marbled with light green. Flesh white and solid, seeds red. It should be borne in mind that this variety is not for eating in the raw state, but for preserves, pickles, etc. Pkt. 5c, oz. 10c, 2 oz. 15c, 1-4 lb. 20c, 1b. 60c.

Triumph

A southern variety which has become very popular with shippers. The fruit is uniformly large, nearly round, dark green, indistinctly striped with a lighter shade; rind thin and firm, making it an excellent shipper; flesh bright red and of good quality. Pkt. 4c, oz. 10c, 1-4 lb. 20c, 1b. 60c.



ONIONS

Good onion seed is of the utmost importance, as onions are one of the most important crops grown, both in market and family gardens and there is no other vegetables where the quality of the seed exerts a greater influence upon the crop than onions. There is more money in onions grown from seed than almost any other crop. Fully realizing this, we have for many years made a specialty of onion seed which is all grown from choice, selected bulbs, critically examined before being set out for seed. In vitality it is very strong, being carefully tested, and we are sure that our onion seed **CANNOT BE EXCELLED** in purity, vitality or high quality. Large onions can easily be grown the first year from the seed by obtaining our American grown new crop onion seed. Our crop was good this year and prices are reasonable. In comparing our prices with others, remember that **WE PAY THE POSTAGE**. Deduct 10c per pound if to be sent by express. Ask for prices in large lots. Packets contain about 1,000 seeds.

CULTURE—One ounce will sow about 100 feet of drill; 4 pounds will sow one acre. The soil for onions should be a rich loam thoroughly enriched with well rotted manure and pulverized before sowing the seed. It should be as free from weeds and grass as possible. As early as the ground can be worked in the spring, sow the seed in drills 14 inches apart, covering one-half inch. Commence hoeing as soon as the rows can be seen; skim the ground over the surface; avoid stirring deeply, and work the soil away from the bulbs. At second hoeing weed carefully and thoroughly by hand. When the tops die, pull and spread evenly over the ground; stir or turn until fully dried, then cut the tops one-half inch from the bulb. For pickles or sets, the seed should be sown very thickly, about 50 pounds to the acre for sets, and 15 to 20 pounds for pickling.



White Portugal or Silver Skin Matures early, very mild flavor, medium size, generally preferred for table use, not good keeper; best variety to grow sets. Pkt. 4c, oz. 20c, 1-4 lb. 60c, 1 lb. \$2.00, 4 lbs. not prepaid, \$7.25.

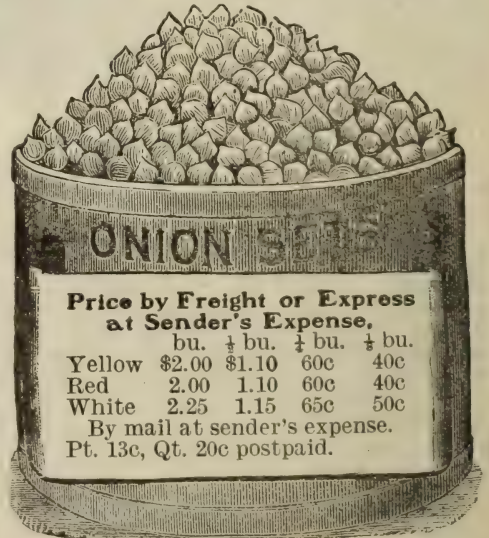
Yellow Globe Danvers A very handsome, round or globe shape variety of large size, with thin, yellow skin, white flesh, fine grained, mild, very firm and the best of keepers. It ripens early, sells readily at the highest prices in our markets. This is one of the best cropping varieties in existence, has yielded 1,000 bushels per acre, and one of our customers states that his crop averaged over 800 bushels per acre for nine years. Pkt. 4c, oz. 10c, 1-4 lb. 30c, 1 lb. 90c, 4 lbs. not prepaid, \$3.00.

Mammoth Prize-Taker This is the large, beautiful Spanish variety, sold in the fruit stores and markets of all large cities. Enormous size, 14 to 16 inches in circumference. Although of such great size, it is very hardy and a good winter keeper. Outside skin is rich yellow, while the flesh is white, sweet and tender. They bottom well, are free from stiff-necks, and have produced more bushels of marketable onions to the acre than any other variety in America. In market they attract attention, sell readily at advanced prices. TRUE AMERICAN GROWN SEED. Pkt. 4c, oz. 15c, 1-4 lb. 45c, 1 lb. \$1.50.

Large White Globe The handsomest market variety in existence, making beautiful, clean, pure silvery white bulbs of large, even size, globe shape, mild and pleasant flavor, and outsells every other variety. It is comparatively a good keeper and undoubtedly the best white sort. Pkt. 4c, oz. 20c, 1-4 lb. 60c, 1 lb. \$2.00, 4 lbs., not prepaid, \$7.50.

Red Globe This early strain of the well-known Southport or large Red Globe onion, is a most valuable improvement. The handsome shape, color and keeping qualities of this onion make it one of the very best varieties, which are always in demand toward spring. Price pkt. 4c, oz. 15c, 1-4 lb. 50c, 1 lb. \$1.40, 4 lbs., not prepaid, \$4.50.

Mammoth Silver King Attractive form, flattened but thick through. Single bulbs often attain weights of from two and a half pounds to four pounds



Price by Freight or Express at Sender's Expense.

	bu.	½ bu.	¼ bu.	bu.
Yellow	\$2.00	\$1.10	60c	40c
Red	2.00	1.10	60c	40c
White	2.25	1.15	65c	50c

By mail at sender's expense.
Pt. 13c, Qt. 20c postpaid.

each. The skin and flesh are white, and of a particularly mild and pleasant flavor. Matures early and is of uniformly large size and perfect form, and will bring a large price in market. Price, pkt. 5c, oz. 10c, 1-4 lb. 75c, lb. \$2.25.

Yellow Globe (Southport) Very large; skin fine deep yellow color; keeps well. Price, pkt. 4c, oz. 10c, 1-4 lb. 35c, lb. \$1.25.



This is the greatest, grandest, surest cropper, most productive and most popular sort that is cultivated in the western and middle states. Excellent keeper, and sells well everywhere. Good, large, marketable size, and the shape is very attractive. Sow 4 pounds per acre, in drills; rows 12 to 15 inches apart. Cultivate thoroughly, and keep free from weeds and a good crop can always be obtained. Pkt. 4c, oz. 10c, 1-4 lb. 30c, lb. \$1.00 4 lbs. \$3.50.

Good Onion Seed.

Good onion seed is a blessing, but cheap onion seed is an abomination. The country is every year flooded with impure or ancient seed that is offered at a low price, but such seed is in reality a high priced, wholly unsatisfactory article. We are sure that first class onion seed of the crop of 1902 cannot be purchased at lower prices than those quoted in this catalog, and confident that no onion grower in America can really do better than to send direct to headquarters, Ratekins' Seed House, Shendoan, Iowa.

Cheap Onion Seed is Expensive even as a gift.

The country is flooded with it, but we are satisfied that good fresh seed, crop of 1902, cannot be purchased at lower prices than quoted in this book. The figures given herewith are the lowest prices we will likely be able to quote for many years to come. Bear in mind, good, sound, plump seed has always been one of our greatest specialties, and that more than 10,000 onion growers look to us annually for their supply of seed.



Moss Curled Parsley.

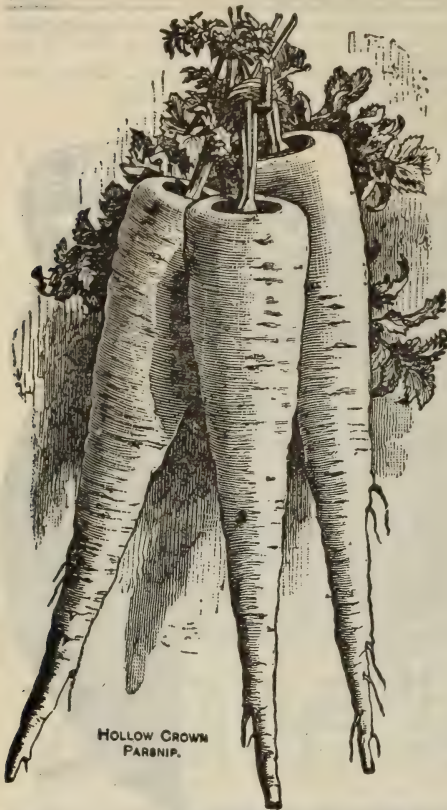
Parsley

One ounce will sow 150 feet of drill.

Sow in March, thinly in drills one foot apart and half an inch deep. Soak seed in warm water a few hours before sowing. For winter use protect in a glass frame or light cellar. Very useful for flavoring soups and stews and for garnishing. The green leaves are used for flavoring, or they may be dried crisp, rubbed to a powder and kept in bottles until needed.

Moss Curled A very select stock, most beautifully crimped and curled. Per pkt. 4c, oz. 10c, 1-4 lb. 25c.

Hamburg A turnip rooted variety, used for flavoring soups, etc. Per pkt. 4c oz. 10c, 1-4 lb. 20c, lb. 65c.

HOLLOW CROWN
PARSNIP.

years ago. Plant vigorous, compact, very productive, the most popular and desirable sorts. Fruit large, cylindrical, with thick, mild flesh; color bright red when ripe. Pkt. 4c, oz 15c, 1/4 lb. 50c.

No doubt many novices, amateurs, and others without practical knowledge, experience or capability, will copy after our "book," in fact, we have personal knowledge of those now waiting to obtain a copy of our book as soon as out of print before printing their own effusions, in order to get copy to go by, and thus palm off their catalogs as their own productions. Kind reader, should you see some of them, you can draw your own conclusions.

Parsnip

One ounce will sow 200 feet of drill; 5 lbs. to an acre.

Sow early in spring in good rich soil, which has been plowed deep, in drills 15 inches apart, covering half an inch. Thin to five or six inches apart in rows. They are improved by frost.

Long Sugar or Hollow Crown The old standard. Pkt. 4c, oz. 10c, 1/4 lb. 20c, lb. 40c.

Improved Table Guernsey A greatly improved fine strain of the Guernsey Hollow Crown parsnip. The roots do not grow as long as the Hollow Crown, but are of greater diameter and more easily gathered. A very heavy cropper; the roots are smooth, with a deep hollow crown and a small top. The flesh is fine grained and sweet and of excellent quality; cooks evenly all the way through to the center which is as fine, soft and even quality as outside portions. Pkt. 4c, oz. 10c, 1-4 lb. 25c, lb. 65c.

Pepper

One ounce will produce about 1,800 plants.

The culture of pepper is the same as for egg plant; the plants need quite as much heat to perfect them, though they mature sooner and may be sown a little later. Guano, hen dung, or any other bird manure, hoed into the surface soil when the plants are about six inches high, will wonderfully increase the product and also improve the quality of the fruit.

Sweet Mountain Plants very productive, growing upright, with moderately large leaves. Fruit very large, long, often eight inches or more in length, by two in diameter, very smooth and handsome, being when unripe of a bright, deep green color, entirely free from any purple tinge, and when matured, of a rich red. Flesh very thick, sweet and mild flavored. Well suited to use as a stuffed pickle. Price, pkt. 4c, oz. 15c, 1/4 lb. 50c.

Large Bell or Bull Nose Our stock of this well-known variety which is sometimes called Sweet Mountain is a great improvement on the best stock obtainable only a few years ago. Fruit large, cylindrical, with thick, mild flesh; ripening its crop uniformly and early. It is one of the best.



Large Bell or Bull Nose Pepper.



Monstrous large, productive sort of recent introduction. Desirable for Mangoes. Bright glossy, ruby-red color and largest known. A great, large, mild, sweet, attractive variety and valuable acquisition. Pkt. 4c, oz. 15c, 1 lb. 50c

Peas

One ounce will plant about 100 feet of drill; 2 to 3 bushels per acre.

Peas are extremely hardy and will endure a great deal of cold, either in or above ground. By sowing as early as the ground can be worked and making repeated plantings at intervals of two weeks, peas of excellent quality may be had far into the summer. Sow in drills two or three inches deep and from three to four feet apart, narrow for the dwarf and wide for the tall growing sorts. Dwarf growing peas require rich soil and no support; tall growing varieties should be trained to wire trellises or supported by brush. If the soil is rich they will run too much to stalks. Wrinkled peas marked * contain a greater amount of saccharine matter than the smooth sorts.

Crop of seed peas was very short the past season as was the previous year, so none were held over, and prices are out of sight and higher than for the last ten years. Our crop was fair and we have a liberal supply, so are able to offer them down low and of the best quality.

Prices as given are postpaid. If ordered by freight or express at sender's expense, deduct 7c per pint, 15c per quart from prices given.

Alaska Height two feet, pods rather small, dark green color, well filled, the earliest pea known, being two days earlier than the Rural New Yorker, and ninety per cent of the pods can be gathered at the first picking. Per pkt. 5c, 1/2 pt. 15c, qt. 50c; by exp. 1/2 p. \$1.00, pk. \$1.75.

*Nott's Excelsior

A superb new variety, and we are sure our customers will welcome it as an ideal family and market pea. It is fully as sweet and delicious as the American Wonder, and grows one-half taller. Pods are larger and it is far more productive than the Premium Gem, and it is within a day or two as early as the first early smooth pea. The peas were ready for table use within forty-three days from planting. Quality very superior. Per pkt. 5c, 1/2 pt. 15c, qt. 50c. By exp. 1/2 pk. \$1.25, pk. \$2.25.





Peas=Continued

American Wonder

The most popular extra early variety for the family garden. Being very sweet it cannot be planted quite as early as the above as it will not stand as much cold wet weather, but it is far superior to the extra early smooth sorts in flavor and table qualities and is quite productive. Of dwarf and robust habit, growing about ten inches high, and produces a profusion of good sized, well-filled pods fairly packed with the finest flavored peas. On good soil each vine will average twelve pods and each pod six peas. The vines grow from eight to twelve inches high. Per pkt. 5c, $\frac{1}{2}$ pt. 20c, qt. 60c. By exp. $\frac{1}{2}$ pk. \$1.25, pk. \$2.25.

First and Best

A standard first early variety popular with gardeners in all parts of the country. This variety is perhaps more largely grown by market gardeners for first early than any other. Crop is very short this year. Pkt. 5c, $\frac{1}{2}$ pt. 12c, qt. 40c; by exp. $\frac{1}{2}$ pk. 90c, pk. \$1.65.

Iowa Challenge

An extra early variety of superior merit which is a favorite with Shenandoah market gardeners. We can, in confidence say that after a trial of nearly all extra early varieties offered to the trade we have not found one possessing more merit—hence its name. For the market gardener it has no superior. It is not only extremely early and prolific, but it is of good flavor. All the good qualities of the Extra Early are most nearly brought to perfection in the Challenge. Vines 18 inches. Pkt. 5c, $\frac{1}{2}$ pt. 15c, qt. 50c. By express, $\frac{1}{2}$ pk. \$1.00, pk. \$1.75.



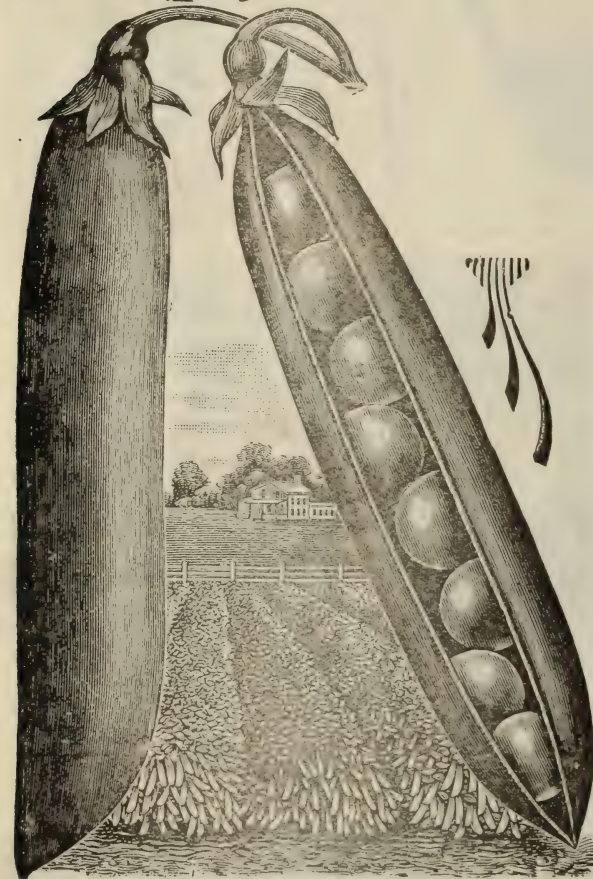
Iowa Challenge Pea.

***Everbearing** Height two feet; late to very late; hardy, vigorous, enormous cropper, pods and peas of large size and good quality. Pkt. 5c, $\frac{1}{2}$ pt. 15c, qt. 45c; by express, $\frac{1}{2}$ pk. 85c, pk. \$1.50.

***Champion of England** One of the richest best flavored peas grown. Pkt. 5c, $\frac{1}{2}$ pt. 12c, qt. 40c; exp. $\frac{1}{2}$ pk. 75c, pk. \$1.25.

Improved Stratagem Late variety for family or market use. Half dwarf, vigorous, branching habit, and under favorable conditions an enormous cropper. Pods long and filled with seven to nine large peas of extra fine quality. Pkt. 5c, $\frac{1}{2}$ pt. 15c, qt. 50c. By exp. $\frac{1}{2}$ pk. 85c, pk. \$1.50.

McLean's Little Gem An early dwarf, green, wrinkled variety, growing about fifteen inches high. When green it is very large, sweet and of delicious flavor. Pkt. 4c, $\frac{1}{2}$ pt. 30c, qt. 50c.



Improved Stratagem.

Tom Thumb This variety was introduced thirty years ago. Vine bushy, growing to a height of ten inches; foliage heavy; productive, matures in thirty-five days after sprouting. Pkt. 5c, $\frac{1}{2}$ pt. 15c, qt. 40c.

Marrowfat Is grown largely by gardeners and also sown as a field pea for stock. Per pkt. 5c, $\frac{1}{2}$ pt. 10c, qt. 35c. By express, $\frac{1}{2}$ pk. 60c, pk. \$1.00

Field Peas See list of Miscellaneous Field Seeds.

Pumpkins.

One ounce will plant 25 hills; 4 pounds will plant one acre.

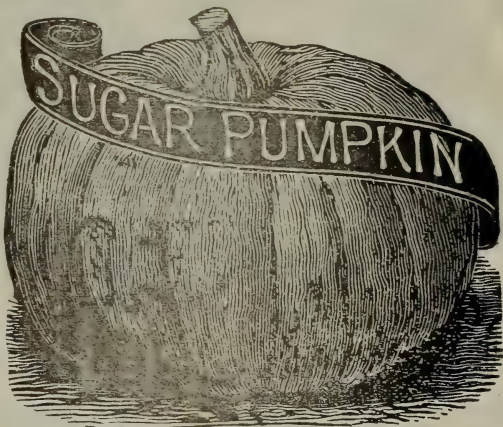
Pumpkins are not so particular in regard to soil as melons or cucumbers, but in other respects are cultivated the same, though on a larger scale. They are generally raised between hills of corn, but may be planted with success in fields by themselves.

Pumpkins are sold in the markets in large quantities every fall and are considered a very profitable crop. They are also valuable for feeding to stock.

Include a few pounds in your order. Planted with corn two pounds will plant one acre.

Sweet or Sugar

Fruit small and round. A very prolific variety and superior for pies and table use. The skin is deep orange yellow, an excellent keeper. Per pkt. 4c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 60c.



Large Cheese

(Kentucky Field.) Large, round, flattened fruits with creamy buff skin. It is an excellent keeping variety, with thick flesh of exceptionally fine quality. Commonly called sweet pumpkin throughout the west. Pkt. 4c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 50c.

Connecticut Field

The common field or cow pumpkin. If you have any live stock to feed it will pay you to put in a few acres of these. Per oz. 5c, $\frac{1}{4}$ lb. 10c, lb. by mail, 35c. By express or freight, 10 lbs. \$1.75; bushel of 25 lbs., \$3.00.

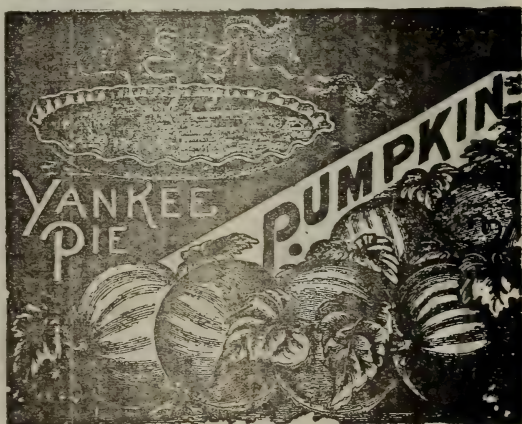


Large Cheese Pumpkin.

Yankee Pie

This is the noted New England Pie or Small Sugar Pumpkin. Same shape and color as the Connecticut Field, but smaller, very sweet, fine grained and one of the best varieties for table use. We have sold this to thousands of customers in all parts of the country and it pleases everyone for making pies. Early and very productive. Pkt. 4c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 60c.

We want every one of our FARMER FRIENDS, and that means all who receive this book, to plant some of our Pumpkins this year.





One ounce for 100 feet of drill; 8 to 10 pounds for an acre.

All varieties thrive best in light, sandy loam. For early use sow in hot bed in February, giving plenty of ventilation, or outside in drills as soon as the soil can be gotten in order, covering the seed about half an inch deep. Sow every two weeks from March to September for a succession. They must grow rapidly to be crisp, mild and tender.

Early Scarlet Turnip One of the handsomest of the turnip radishes and a great favorite in many large markets, for early planting outdoors. It is but little later than the White Tipped, Forcing, and will give entire satisfaction where extreme earliness is not the primary object. Roots slightly flattened on the under side; color very deep scarlet with a white tip; flesh white and of the best quality. Pkt. 4c, $\frac{1}{4}$ lb. 15c, lb. 50c.

Early Long Scarlet Short Top An old standard variety of quick growth, with long, slender roots. Radishes are ready for market about twenty-five or thirty days after planting seed; flesh crisp and mild. Per pkt. 4c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 50c.

Early Frame Smaller and about ten days earlier than Long Scarlet, which it very much resembles. Pkt. 4c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 50c.

French Breakfast A small, handsome variety of very quick growth; one-half inch in diameter and two inches long. Color bright carmine with clear white in lower portion. Per pkt. 4c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 60c.

Scarlet Turnip, White Tip Handsome bright scarlet, white tip. Many gardeners make sowings of it every two weeks during summer; its fine appearance attracts customers; quality always pleases. Pkt. 4c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 60c.

Rosy Gem An improvement on the Scarlet Turnip White Tip. Their shape is perfectly globular, with rich, deep scarlet top, blending into pure white at the bottom, exceedingly tender, crisp, delicious, equally desirable for either the market or home garden. Pkt. 4c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 60c.

Improved Chartist Is decidedly distinct in appearance from any radish in cultivation. Its form is well defined by our engraving, the color at the top being crimson running into pink about the middle, and from thence downward is a pure, waxy white. Pkt. 4c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 60c.

White Lady Finger An improvement on White Naples, or Vienna. Large, white, crisp variety, about as long as Long Scarlet, and similar in shape. A very desirable sort. Pkt. 4c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 60c.

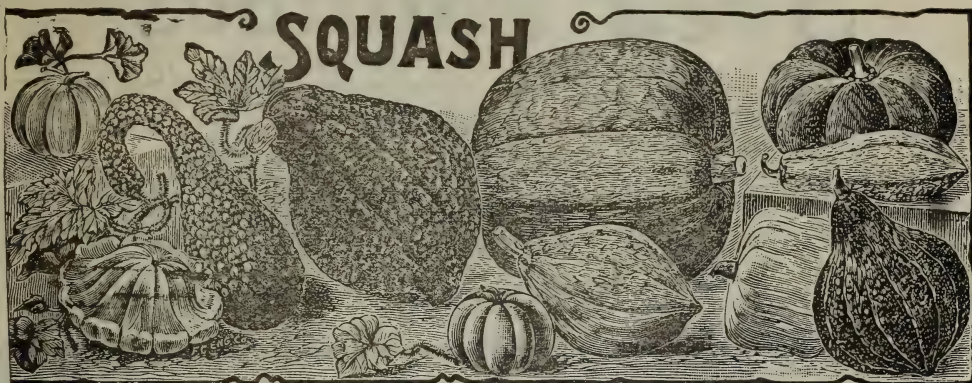
White Strasburg Of handsome, oblong, tapering shape, both skin and flesh are pure white. The flesh is firm, brittle and tender, and possesses most desirable character of retaining crispness even when old and large. Excellent for summer use, and withstands severe heat and grows very quickly. Pkt. 4c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 60c.



Improved Chartist.

RADISHES

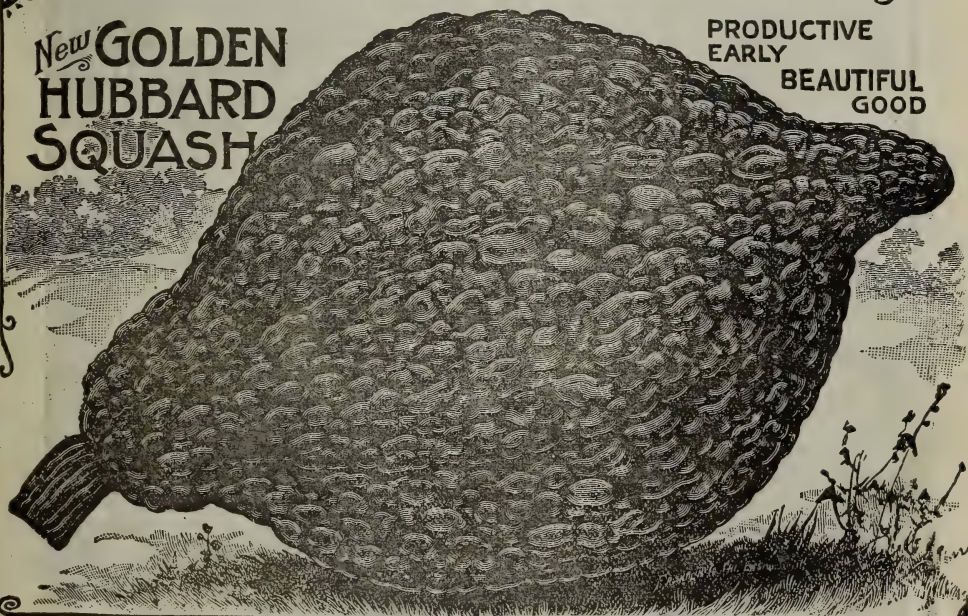
Our list contains all the very best Radishes in cultivation, and prices are by mail postpaid. All of our Radish Seed is the best French grown and can be relied upon as being the best in the market.



The Squash is one of the most nutritious and valuable of all our garden vegetables. Few farmer appreciate the value of winter squash as food for stock. We think an acre of squash, costing no more to cultivate, and much less to secure, will give as much food available for feeding stock as an acre so corn, and we strongly urge our readers to try a "patch" for this purpose.

New GOLDEN HUBBARD SQUASH

PRODUCTIVE
EARLY
BEAUTIFUL
GOOD



This is a True Hubbard Squash, except in color, which is bright golden—The vine is a vigorous but not rampant grower and wonderfully productive, expending the energy derived from liberal fertilizing in the production of an increased number rather than of overgrown and coarse fruits, as some varieties are apt to do. It ripens its crop very early and uniformly, thus making it a certain cropper. The fruits are very uniform in size, weighing from 6 to 8 pounds, and in shape are like the Hubbard. Though maturing early, they are wonderfully long keepers, so they can be held over in good condition for spring use. The shell is warty, hard and strong, and a very beautiful orange red color, except for a bit of olive green on the blossom end. The flesh is a deep orange and uniformly so to the rind, never having the green tinge so objectionable in other sorts. It cooks very dry, fine grained and good flavored. We believe this is the best fall and winter sort yet introduced, and that it deserves to and will become a most popular variety. It certainly has no superior as a table squash. Send to RATEKINS' for the best seed. Pkt. 5c, oz. 8c, $\frac{1}{4}$ lb. 20c, lb. 65c.

Blue Hubbard or Marblehead

A splendid winter variety. Shell very hard, light blue color, flesh similar to the Hubbard in quality. Per pkt. 4c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 65c.

White Bush Scalloped

Similar to the Golden Bush. Color creamy white; an excellent variety for the family garden for early use. Pkt. 4c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 50c.

Early Bush Crookneck

Splendid summer sort, early, productive, very fine quality. With all the new varieties recently brought out many claim that there is no summer squash superior to this. Pkt. 4c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 45c.

Seed Potatoes

IT PAYS TO CHANGE SEED EVERY YEAR.

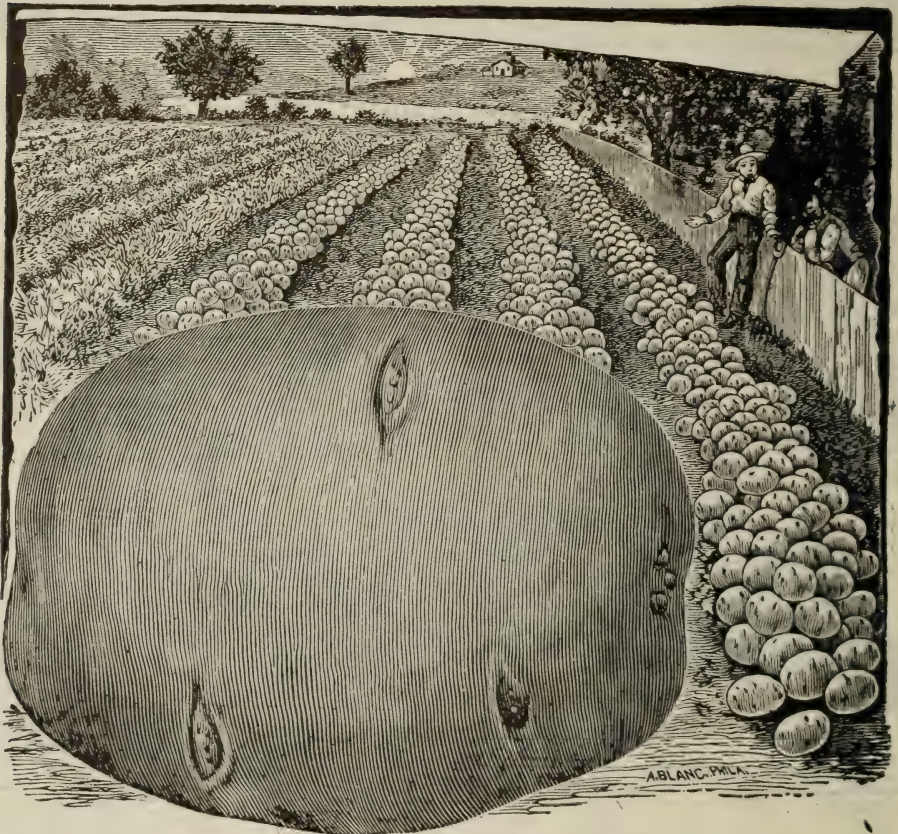
NORTHERN GROWN SEED POTATOES

No potatoes grown can compare with those produced in the north, either for vigor and freedom from disease, or producing and long keeping qualities. Our seed potatoes have been carefully and especially grown for seed. Last season was rather unfavorable for growing potatoes, but we are pleased to say that the quality of our stock is as fine as was ever grown.

ADVANTAGES OF CHANGING SEED

There is no other crop that we raise that is so much benefited by the introduction of fresh seed from time to time as the potato. They seem to take on new life and to prosper wonderfully, provided the change is to a well selected stock, and the further north it is grown, the better. Our best customers will not plant their own raising of seed at all, but buy of us every year. They can grow nearly double the crop on the same land that they can from their own raising, and the tubers are smoother, handsomer and of better quality and more saleable on the markets.

Early Ohio Potatoes Our Specialty.



EARLY OHIO

Early Ohio is the most popular early potato in this country. We have more calls for it than any other variety. Every potato grower knows what it is, and knows just about what it will do in his locality. It is the standard extra early the country over, and other varieties are measured by it. We will venture to say that not one farmer in ten, the country over who thinks he has Early Ohio has pure stock. Most of them do not know they are mixed. But Early Ohio is an old variety and has become frightfully mixed throughout the United States. Farmers and market gardeners better sell off their own Ohios and get some of our improved grown from Red River Valley seed. We consider our stock of Ohios to be the earliest, purest, and altogether the handsomest stock of Early Ohio potatoes to be found anywhere. They are grown under conditions that make them cost more than common stock. They are selected with the utmost care and the result is grand, such as to delight everyone who knows and appreciates a good potato. Every one of them is a "picture" of what an Early Ohio potato should be. Pk. 35c, $\frac{1}{4}$ bu. 55c. bu. 1.25 5 bu. or over 90 cents a bushel.

EARLY ROSE

Grown on Red River Valley of North Dakota. Fancy hand picked, selected stock, smooth and nice. For several years past we have been having these grown in the noted Red River Valley, about five hundred miles north, and careful tests have proven them to be fully ten days earlier than our Iowa grown stock. This is a great advantage to the gardener and puts this variety at the head of the list of the extra earlies. They are all of good average size, strictly pure, smooth, and entirely free from scab and rot. In our tests they are positively the earliest to mature

their entire crop of any variety we have ever had and outyield others about two to one. This is a standard variety. Don't plant Iowa grown stock when you can obtain these, as the result our customers obtain from this seed is wonderful. One prominent market gardener, who raised a great many varieties re-

ported that our Early Rose beat them all. We bought our stock early from the most reliable grower and we can honestly say our present stock of several thousand bushels is the finest we have ever stored away for seed and are offering them at an exceptionally low price.

We could give hundreds of testimonials, highly praising our Red River potato

Early Rose Potato.

and there is not the shadow of a doubt that they are the greatest early potato ever raised. Pk. 35c, $\frac{1}{2}$ bushel 55c; bushel \$1.00; 5 bushel, or over 90 cents per bushel.

BANNER POTATO

Introduced in 1891. The banner is the finest Main Crop White Potato on the market, and probably no variety ever introduced has made as good a record in so short a time with all classes of growers on all kinds of soil. None surpass it in **Uniform Handsome Appearance**. Its shape is a little oblong and slightly flattened, (cooking through easily). The eyes are very shallow. The size is large and desirable, very few under market size. Always smooth and regular in form; strong and vigorous from the very sprout. As near blight and scab proof as any. The flesh is very white, and whether boiled or baked has the same fine table qualities, always dry and floury. Season medium late. Choice Sorted Northern Grown Stock. Pk. 40c, $\frac{1}{2}$ bu. 70c, bu. \$1.25; 5 bu. or over \$1.00 per bu.

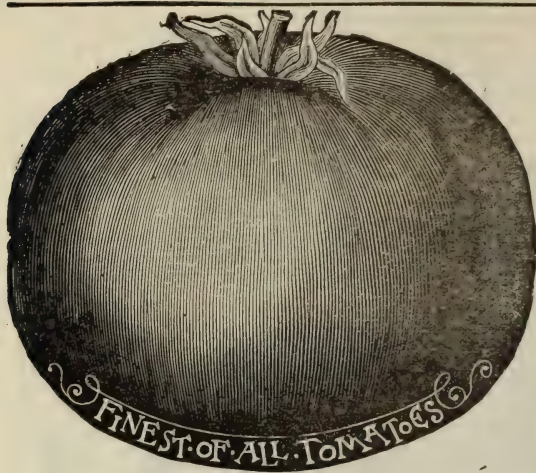
Earliest Six Weeks

This is a new potato of the Ohio type, and it seems to be in great demand everywhere. It is not the heaviest yielder, but is particularly adapted for the early garden, as it will produce good size, round to oblong, smooth tubers, ready for use, everywhere in six weeks from planting, and the tubers will be in good condition for cooking, even when partly grown. Market gardeners and all others who grow potatoes, cannot afford to be without this splendid early potato. We will say that the Six Weeks is planted by more people who want a few early potatoes in the garden than any other variety in existence. They grow so rapidly and mature so early that the potato bugs have no chance at all, making their crop, if planted early, before the young bugs become numerous and the yield is always good, considering their extra earliness. Pk. 50c, $\frac{1}{2}$ bu. 90c, bu. \$1.50.

Write for Prices on Larger Quantities.

SPECIAL OFFER

In order to give our customers a chance to try our varieties of potatoes we offer one peck of each sort, consisting of three varieties at 75 cents. ✂ ✂ ✂



Improved Trophy Tomato.

Improved Trophy

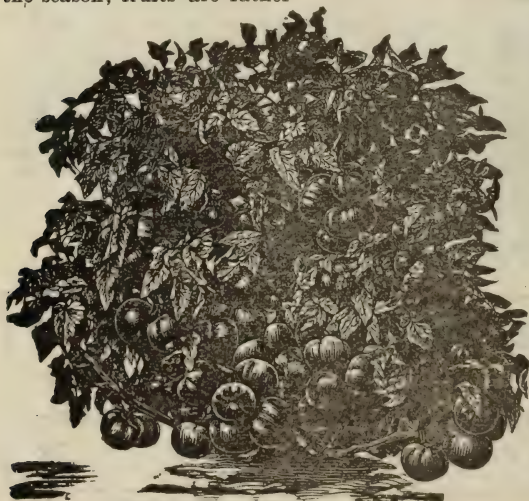
First of modern improved kinds. Our Improved Trophy is a sort whose large vigorous and productive, large, solid, smooth, fine flavored, beautiful fruit will satisfy the most exacting. Much liked for canning as well as fresh. Pkt. 4c, oz. 20c, $\frac{1}{4}$ lb. 65c, lb. \$2.00.

Perfection

Solid flesh, always smooth and of blood-red color. This is a general favorite, equally desirable for the home garden, for shipping and for canning. Pkt. 4c, oz. 15c, $\frac{1}{4}$ lb. 50c.

Acme

A popular early variety, with smooth, round, purple fruits of medium size. Ripens a large number early in the season; fruits are rather



Dwarf Champion Tomato.

Tomato

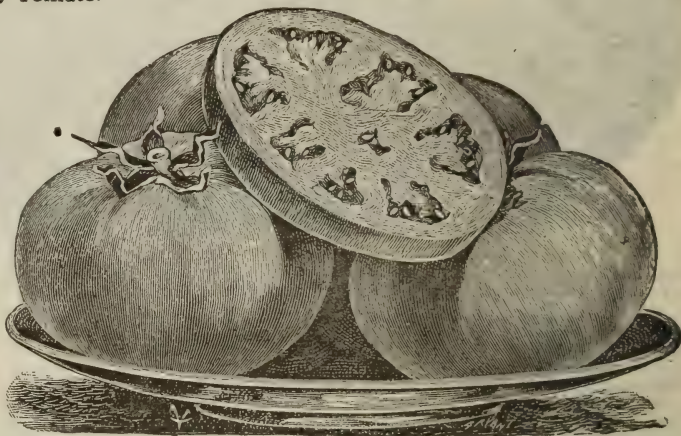
One ounce for 1,500 plants.

Tomatoes do best in a light, warm, not over rich soil, sowing it into hot beds during March. When the plants are about two inches high, transplant in boxes three inches deep and four or five inches apart. Set out of doors as soon as danger from severe frost is over. The fruit will come easier if the vines are tied to a trellis.

Extra early advance

Unquestionably the earliest of all. If you sow Advance you will have with favorable weather, fine tomatoes in 90 days from sowing the seed. It is an excellent shipper, being exempt from rot or cracking, ripens all over at once, and is a wonderfully smooth tomato—none smoother. Pkt. 4c, oz. 15c, $\frac{1}{4}$ lb. 50c, lb. \$1.50.

Favorite Medium size fruit of rich, dark red color. Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 50c, lb. \$1.65.



Early Advance Tomato.

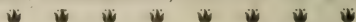
soft and liable to crack. Per pkt. 4c, oz. 15c, $\frac{1}{4}$ lb. 50c, lb. \$1.50.

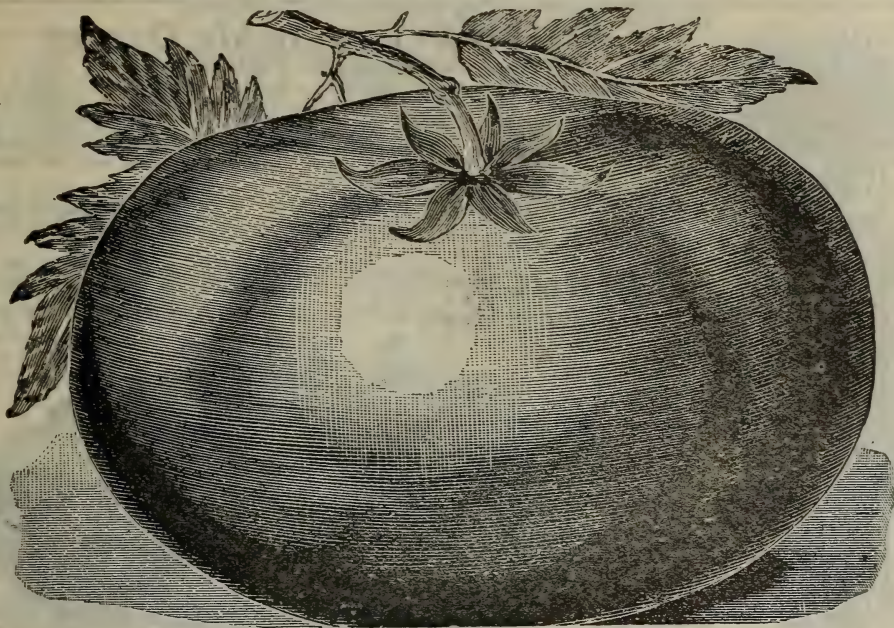
Dwarf Champion

Its habit of growth is peculiar, for not only is it dwarf and compact, but the stem being thick, stiff and short-jointed, it is almost self-supporting when laden with fruit. In productiveness it is unsurpassed. It is also very early. The fruit is of a purplish pink color, always smooth and symmetrical and the flesh solid and of fine quality. Can almost be called a tree tomato. The best variety to grow for plants for sale as they are so stocky. Seed is very scarce this year. Per pkt. 4c, oz. 25c, $\frac{1}{4}$ lb. 75c, lb. \$2.25.

Our Tomato Customers

will please bear in mind that all our tomatoes are grown for seed only, and used for no other purpose. The seed we offer has all been obtained from the best specimens, selected with great care, and is superior to much offered at low prices that has been secured at canneries, etc.





Beauty Tomato

Beauty Tomato

Its size, beauty, shape, color, flavor, durability and productiveness make it desirable to all classes of Tomato growers. Glossy crimson with slight tinge of purple. Pkt. 4c, oz. 15c, $\frac{1}{4}$ lb. 50c, lb. \$1.50.



Stone

This is the heaviest and most solid fruited of the large tomatoes of good quality. Our stock is distinctly superior to most of that offered under this name, being more uniform, better colored and larger. Vines vigorous and productive. Fruit round apple-shaped, very large, very deep red in color and astonishingly heavy. Pkt. 5c, oz. 25c, 2 oz. 40c, $\frac{1}{4}$ lb. 75c.

25 cent Bargain Collection

For 25 cents we will send one package each of our great tomatoes. These varieties will prove very interesting and profitable in any garden. Value 40c for 25 cents.



Salsify=Vegetable Oyster

One Ounce for 50 Feet of Drill.

When properly cooked it is a good substitute for oysters in taste and flavor, and is very nutritious. In cooking, the roots are usually boiled, or they can be mashed and made into fritters. Succeeds well in the light, well enriched soil. If it is necessary to use manure, it should be very fine and well rotted. Sow early in drills, 18 inches apart, 2 inches deep, finally thin to 4 or 5 inches. Roots are perfectly hardy, and may remain out all winter. They are best after frost has touched them.

MAMMOTH (Sandwich Island) This variety grows uniformly to an extra large size, averaging fully double the size and weight of the old white variety. Mild and delicious flavor. Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 40c, lb. \$1.35.

Spinach

One Ounce of Seed for 100 Feet of Drill; 10 lbs. for an acre. If ordered by exp. deduct 10c per lb.

For spring use sow early in drills 1 foot apart, and for succession every two weeks.

As it grows thin out for use keeping it clear from weeds. For fall use sow in August; for winter use sow in September in ground well manured; mulch with straw on approach of severe cold weather.

ROUND SUMMER

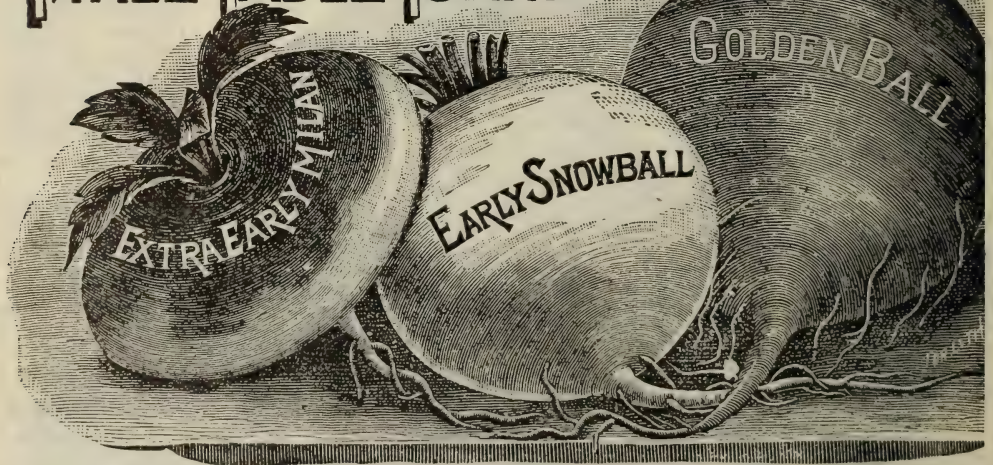
A standard sort with

Round Summer. market gardeners for early spring; stands the winter well, but is not quite so hardy as the Prickly; leaves large, thick, fleshy. Pkt. 4c, $\frac{1}{4}$ lb. 15c, lb. 35c.



Mammoth (Sandwich Island.)

THREE TABLE TURNIPS



Extra Early Purple Top Milan

4c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 60c.

Golden Ball or Orange Jelly

A very beautiful and bright yellow turnip of medium size. It is hardy and one of the best of keepers. Flesh extremely firm and solid. Always brings a good price in the market. Pkt. 4c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 60c.

Early Snowball

A globe-shaped, white-skinned turnip, which is exceedingly productive, very early and particularly adapted for family or market use. Pkt. 4c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 60c.

RUTA BAGAS—PURPLE TOP—A large early sort of fine quality. Roots globe-shaped, skin purplish-red above ground and yellow below; flesh yellow, necks small. An excellent variety in every way. Pkt. 4c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 60c.

SEED CORN

We have made the growing and handling of improved and pure bred varieties of seed corn our leading specialty for the past nineteen years, and for a number of years before we took up other Farm, Field and Garden seeds. During this time we have grown, sold and sent out more seed corn than any other growers, and more than all the Garden Seed Houses in the United States combined.

SEED CORN: We mean by that, corn that has been especially selected from the best known varieties in existence, of a pure type, planted under the most favored conditions for no other purpose than for seed. More than fifty years practical experience on the farm, in one of the best corn growing districts in the United States or under the shining sun, nineteen years of which have been devoted to the culture and breeding of pure varieties of corn for seed purposes, with the added experience of the best, most practical farmers and corn growers all over the country where ever corn is grown has convinced us that the essential points most desired is seed that will grow, a pure variety of uniform good size, deep, strong, rugged root and stalk, thus giving it the greatest vitality to withstand drouth, wet, and other unfavorable conditions, with no barren stalks, not of the overgrown Jumbo sorts, but with 16 to 24 rows, deeply set grains and as small cob as consistent to bear them, thus drying out early and quickly, and combining all the essential points to obtain the largest possible yield of the soundest, solidest and best corn in the shortest length of time.

We wish to particularly emphasize the fact that all our corn was planted from our most select strains, especially for seed purposes, carefully sorted, dried, butted and tipped and in every way prepared for seed corn, thus costing us much more than ordinary crib corn, picked up here and there wherever it could be procured at the lowest price and shelled at random, as much of it is that is offered for seed corn; therefore, we cannot and do not attempt to compete in price with ordinary mixed varieties of corn that is offered for seed corn; especially is this very important to the farmer, when the best can be bought at prices **not to exceed 15 to 20 cents per acre and less than a cent per bushel for the increased yield** over what can or is obtained from common ordinary varieties. **None is too good.** Buy only the **BEST**. It always pays ten fold to **plant nothing but the best.**

Our Conscientious Aim

is to reach the farmers, the corn growers and the vegetable growers all over the United States, from north to south and from east to west, and to lay before them a few **practical hints and suggestions** with regard to the advantages of good farming and thoroughbred seeds, as well as to call attention to the value of a change of seed from one locality to another.

Plants, like animals, have their characteristics developed by selection and environment. As to animals no intelligent breeder and grower doubts this for a moment. A little observation will convince any one that qualities are as firmly fixed in plants as in animals. Hence the possibility of improvement. But in order to make the most practical gain in life, it is not only necessary to know how, **But Make Proper Selections and Practical Application**, and this principle of more proper selections was never in this world better exemplified than in the corn crop of Iowa for the past ten years, where the power of the agriculture press has been more wonderfully felt than any state in the Union. Iowa has long been crowned the queen state of the corn belt. But twice in the past 11 years has any other state equalled this state, and for this period Iowa has a credit account of **Three Hundred Forty-Six Millions, One Hundred and Thirty Thousand, One Hundred Forty-Four Bushels**, above any other state in the Union for the same period and length of time. Why should Iowa not be crowned the queen of the corn belt?

Now while these facts must be admitted as incontrovertable there are some reasons in connection with the Iowa corn crop that stick in one's craw, especially is this so when we have the proud satisfaction of knowing that our "Pride of Nishna," "Iowa Silver Mine" and "Imperial" varieties have been largely grown from our seed **in every county in the state, without exception**, and that we have received orders from and made shipments of seed to about every railroad station in the state, during the time named.

We unquestionably have the best location, finest, live, deep, loam soil and most perfect seasons and climate for growing seed corn here in the "Nishna Valley" of southwestern Iowa, to be found in the world, where all the conditions will permit of early planting

BUY YOUR SEED CORN FROM THE GROWER.

and early maturity, always attended with dry, pleasant weather up until near Christmas and sometimes much later. But in our experience these are not all the requirements to obtain the best high quality of seed corn. It requires the best pure varieties, the same as in breeds of stock. This should be propagated with a well defined purpose, planted for seed purposes and improved if possible from year to year. Then corn for seed should be handled and cured for seed purposes, thoroughly dry and kept dry. Most of our corn here will grow, if properly cared for, at picking time, but put up into common corn cribs where it may become damp from snow, rain and various conditions of weather, while it may all be seed corn, or corn, that would grow if tested today, a sharp, solid freeze of a day or two while damp, and not a grain in a thousand will grow. It's cooked; it's done. Finally comes the selecting, sorting, nubbing and examining of each and every ear, and this can be done one way only, by hand, by competent and trustworthy men, men of practical experience and that are experts in that line of business, and to insure this, precaution must be used in the employment of competent inspectors to see that all is well done. To do this properly requires time, and is among other things one of the important items in the business. On this point we plead guilty to the charge of "crank," but believe we are no more cautious on this point than every practical farmer ought to be; for "on the seed depends the crop;" "no seed, no crop;" "poor seed, poor crop;" "but with good seed half the crop is made to start with." We fully realize the ruinous effect of poor seed. The corn crop is the main dependence. The preparation and growing of a corn crop consumes time and labor and can be grown but one time in the whole year. Some people quibble about ten cents on the price of a bushel of seed. This is economy at the spigget while the bung hole flows. The reduction of 10, 20 or even 50 cents on a bushel of seed means but three-fifths or seven cents per acre for the seed it takes to plant it, a poor to half crop means a loss of \$3, \$5 to \$7 per acre in final results. This is not a mathematical problem that requires a mathematician to solve. Figure it up for yourself.

Our trade and business has been built up and conducted strictly with the farmer, thus they have got their seed direct from the grower, and therefore know where they were grown, and whom by, and to know this when they get seed from, at least some seed houses, would require that they be either a prophet or a mind reader. In our business experience we have had scores of requests from seed houses to quote prices for large quantities, and at seasons, early and before the farmer trade began, have made prices on such quantities, at a figure that left almost absolutely no profit to us in order that we might give and keep our help employed until such time as our farmer trade begun, but in no instance, except one above mentioned, have we ever been able to quote **prices low enough** to compete with common crib corn, bought up over the country, regardless of kind, sort, variety or quality, after which it was shoveled into cars and shipped to these seed houses and given a big name, and then sent out at fabulous and extortionary prices.

If you wish to improve your Corn crop, Wheat crop or Oats crop by changing seed we can do you good, and solicit your orders. If you desire any special advice, write us stating kind of soil, up-land or bottom land, as well as object to be obtained, and we will tell you which kind to order.

Whatever kind of seeds you are going to need for the coming season, whether it be seed corn, seed wheat, oats, garden or other seed listed by us, we offer you the very best varieties at prices as low as good seed can be procured for.

Remember our prices are absolutely alike to all, so please don't waste time in writing for lower prices. It's **quality** and **not price** you are **interested in**, as poor seeds are dear at any price, even as a gift.

Early Maturing Corn.

On account of the early maturity of corn raised from Northern grown seed and the consequent reduction of drouth losses, farmers in Texas and adjoining states are planting each year a larger amount of northern grown seed. This year when the production of corn in Texas was so seriously cut down by the drouth, many of the farmers in the drouth stricken districts, who used northern seed reported yields of 30 to 40 bushels of corn to the acre. There are several varieties of northern corn that do well in the Southwest and are recommended by seedsmen. In buying imported seed it is necessary to guard against the purchase of cheap corn, which is sometimes sold by unscrupulous dealers as select seed corn. To keep clear of such seed it pays to deal only with well-known firms, such as J. R. Ratekin & Son, of Shenandoah, Iowa, who have supplied a large part of the northern seed used in Texas and who have a host of well-pleased customers in the state.—Farm and Ranch, Dallas, Texas.

CALE, INDIAN TERRITORY, January 7, 1902. J. R. R. & Son. Gentlemen: I write you to say that I obtained some of your Iowa Silver Mine White Seed Corn last spring and planted it in West Texas, and while it was very dry and but little corn grown, I am pleased to say that I obtained more than twice as much from your seed as was grown here by any one from our common native sorts. Very respectfully, G. M. Boyd.

BUY YOUR SEED CORN FROM THE GROWER.

"Ratekins' Pride of Nishna"

The Corn That Made Iowa Famous the World Over.

"RATEKINS' PRIDE OF NISHNA" is not a newly discovered variety of corn that has been recently found buried under the ruff sands of the sea for a thousand years or more, as is claimed for some of the so-called new sorts and novelties. But it was originated by us here in the Nishna Valley of southwestern Iowa, some twenty years or more ago, in one of the richest and finest corn growing districts in existence; in the biggest corn producing county in the world; in the biggest corn growing state in the Union; in the state that has grown a net balance of 346,132,144 BUSHELS OVER ANY OTHER STATE IN THE UNION during the period of the last past ten years.



BUY OUR SEED CORN FROM THE GROWER

"RATEKINS PRIDE OF NISHNA"

"RATEKINS' PRIDE OF NISHNA" yellow dent corn is one of the most wonderful varieties of corn this country has ever before produced, and it has never been known to fail in making a good crop wherever corn is grown, and it has been grown over as wide a range of latitude, perhaps, as any other variety in existence, always and everywhere with remarkable yields and good results.

This marvelous variety of corn combines more solid merit and vital points than any other corn in cultivation or in existence, and in all our experience with other varieties we have never found another variety of yellow corn so well adapted to all the varying conditions over a wide range of latitude as our "Pride of Nishna." Its greatest merit lies in always producing the largest yield of the soundest and best corn that can be produced anywhere, from any variety in existence. **EXPERT CORN GROWERS PRONOUNCE IT "A PERFECT ALL-AROUND FIELD CORN FOR FEEDING AND FOR MARKET; FOR SIZE; FOR YIELD AND FOR QUALITY OF CORN."**

This corn is the result of hybridization of two remarkable fine varieties of corn, made some twenty years ago, since which time by careful selection and improvement, its type and characteristics have been fixed and developed to the highest degree of excellence, thus in every way making it the superior of any yellow corn grown or in cultivation.

...DESCRIPTION...

"RATEKINS' PRIDE OF NISHNA:" The stalk is strong and vigorous with dark, heavy foliage, with a deep heavy root, and is of great vitality, withstanding drouth and other unfavorable conditions to a wonderful degree. One of the most marked characteristics of this corn, developed from careful breeding and selection, is that it seldom ever has any barren stalks, and that every stalk bears at least one good sized well developed ear and many of them two, thereby materially increasing the yield from 25 to 30 per cent over ordinary common varieties. The ears are very uniform in size and appearance also in color, which is a beautiful golden yellow; ears measuring about seven inches in circumference and ranging from nine to eleven inches in length, and many of them running a foot long, with from 16 to 24 rows, deep although rugged grains, solidly set on medium cob. This corn is undoubtedly the earliest medium large eared corn in existence, and will mature safely beyond danger of frost in from 90 to 100 days from planting time. Since the origin of this corn our supreme and paramount purpose has been to produce a fixed type of large eared early that would produce and mature the largest yield of good sound corn in the shortest length of time, and in this we feel proud to congratulate ourselves and our thousands of customers; for we have received more than ten thousand unsolicited letters from farmers who have bought and planted our seed all over the country wherever corn is grown, during the last ten years, all uniformly extolling it as the largest yielder; the earliest to mature; the uniformity of the ear; its vitality to withstand drouth and other unfavorable conditions, and in fact as being the best all-around yellow dent field corn in existence. It is like a vigorous young horse, full of blood with strong and vigorous parentage, bred for a certain purpose.

The half tone cut on the preceeding page was made from a photograph and is a reproduction, exact, from a basket of select ears of this corn, none of which measured less than 12 inches long and some even more.

If you want a golden yellow corn for feeding purposes it is the corn to plant; it's the best cattle corn in the world, superior in strength and flesh producing qualities to any other sort, and we hope every farmer—every farmer in the land that plants corn, will try at least a part of his crop to "Pride of Nishna." We cannot too highly recommend it, and can assure all that it will not disappoint your best expectations.

Price by freight or express, at purchaser's expense, peck 40 cents, half bushel 70 cents, bushel \$1.25, 10 bushels and more, \$1.10 per bushel, bags free on board cars here.

Lucas county, Iowa, Nov. 14. "Pride of Nishna" seed corn got from you last spring was planted May 24th; have just gathered it; obtained 74 bushels per acre, 15 to 20 bushels more than from my common sorts, under same conditions.—Samuel L. Boyd.

Harrison county, Iowa, Dec. 2. The two bushels "Pride of Nishna" seed corn I bought of you last spring was planted on fair upland ground. I had a fine stand and yielded fifteen to twenty bushels more per acre than any corn I ever planted. To say I am well pleased is expressing it mildly.—Ambrose Mansfield.

Auburn, Neb. May 6. (Telegram.) J. R. Ratekin & Son:—Ship me at once 25 bushels of your seed corn, equal parts, Pride of Nishna and Iowa Silver Mine. I am now ready to plant.—J. M. Armstrong.

BUY YOUR SEED CORN FROM THE GROWER.

Sabina, Ohio, Aug. 2, 1902. J. R. Ratekin & Son—I planted about 70 acres of your "Pride of Nishna" yellow dent this season and it is looking very fine indeed, and of course I am well pleased.—W. F. Waddle.

Elwood Stock Farm, Savannah, Mo., July 14, 1902. J. R. Ratekin & Son:—The seed corn I bought of you last spring has done remarkably well and I am greatly pleased with present prospects. I laid the "Pride of Nishna" by one month and 18 days from time of first plowing and it was almost too large to get through it without breaking much of it down.—Shannon C. Bohart.

Clay county, Nebraska, August 9. J. R. Ratekin & Son:—I am delighted with results of the "Pride of Nishna" seed corn bought of you. I got a fine stand and your corn is at least eleven feet high and heavily eared, while my native corn is not half as good. I will buy all my seed of you next spring.—B. B. Cronin.

Newton county, Mo. Nov. 28. J. R. Ratekin & Son:—The "Pride of Nishna" and "Iowa Silver Mine" seed corn bought of you last spring gave perfect satisfaction. It out yielded native sorts by far, also matured much earlier. My neighbors will order with me next year.—W. T. Ford.

Clark county, Arkansas, Nov. 26. J. R. Ratekin & Son:—I shall always be pleased to recommend your seed corn, the "Pride of Nishna" yellow obtained from you last season. It yielded fully one-fourth more per acre than common sorts. It is the only seed for southern planters.—A. W. Johnson.

Tarrant county, Texas. J. R. Ratekin & Son:—I planted seed corn shipped direct from you last spring and will say that I did the right thing for this has been a trying season in this part of Texas, and some made a failure. The "Pride of Nishna" and "Iowa Silver Mine" did well and gave excellent results. I am well pleased with both varieties.—J. W. Davis.

Medina county, Ohio, Nov. 10. J. R. Ratekin & Son:—The "Pride of Nishna" seed corn ordered from you last spring was received promptly and on time. I got an excellent stand. Grew slow until July 1st, when we had good rains followed by hot weather, which made it fairly leap until it was twelve feet high, earing finely and in proportion to the stalks. It yielded over 100 bushels per acre. It is just the kind of corn I have long looked for.—C. P. Dickerman.

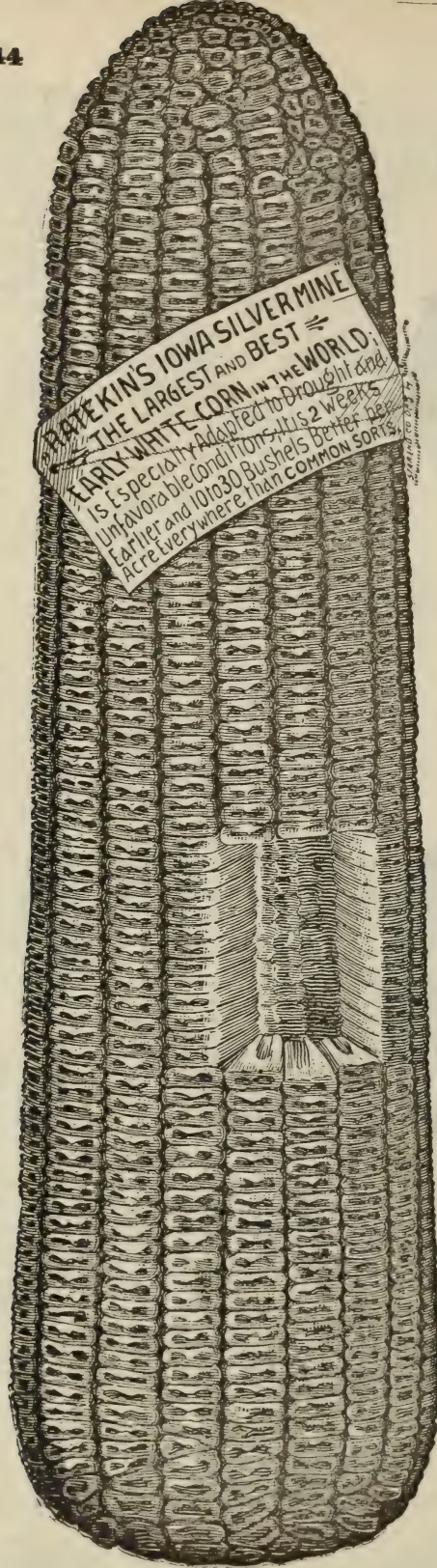
Obian county, Tenn. J. R. Ratekin & Son:—The seed corn obtained from you last spring did well. The last I got was planted July 1st and we had roasting ears from it today, 63 days from day it was planted. My yellow corn made very large ears with but one plowing.—C. A. Hendon.

Marion county, Iowa, March 4. J. R. Ratekin & Son:—I had good results from "Ratekins' Pride of Nishna" seed corn bought of you last spring. It yielded me seventy-five bushels per acre of a nice golden yellow and uniform ears, while native corn given the same care and attention only yielded sixty bushels per acre. I will plant them again next season.—M. M. Gainble.

Republic county, Kas., June 10. J. R. Ratekin & Son:—The seed corn received of you has proven entirely satisfactory and I am under many obligations for the prompt manner in which my order was taken care of. I have a fine stand of corn, and will want more of your seed next spring.—D. Dool.

Saint Charles county, Mo., Dec. 5.—J. R. Ratekin & Son: I planted the seed corn I bought of you last spring and it gave me entire satisfaction. It matured well and averaged a yield far in excess of native sorts. V. D. Deiken.





Ratekins' Iowa Silver Mine White Corn.

The Greatest and Best Variety of White Corn in Existence.

"RATEKINS' IOWA SILVER MINE" White Corn is unquestionably the most marvelous variety of corn ever grown, or in existence and will happily surprise the best expectations of all who plant or grow it. This corn was first introduced in 1894, but nine years ago, and in that length of time it has almost revolutionized the growing of this state, besides it has been grown with equal good results in every part of the United States where corn is grown, and has likewise become the queen of all varieties of white corn wherever tried or tested, it having proven to be suited to a wider range of climate, soil and other conditions than any White Corn in existence. The record it has made and results obtained under all conditions of weather have never been equalled by any other White Corn.

Seed Corn growing has been our main and leading specialty for almost twenty years (nineteen) and during all that time we have never found any variety of white corn that has given such uniform good yields and results year after year, regardless of place or locality as this corn has given.

ITS PRIZE RECORD.

Everywhere the Iowa Silver Mine captures the prizes over all other varieties. At one fair ten of the largest ears took first prize, ten of the smaller took second prize. Afterwards the same ten ears took sweepstakes over all other varieties, both white and yellow, making a total of \$95.00 in prizes taken at one fair by twenty ears of the Iowa Silver Mine Corn. At Illinois State Fair it took first premium for the best husked ear of corn, any color sort; first for best white corn in the state, and Grand Sweepstakes for the Best Corn, of any color, competition open to the world. In 1899 the Illinois State Agricultural Society offered three large prizes for the largest corn crop grown on an acre, and the Iowa Silver Mine captured all three of them with crops of 196, 176 and 154 Bushels per Acre. No other corn of any color can compare with it in wonderful productiveness.

It produced 215 bushels per acre in Scott county Iowa; 211 bushels per acre in Indiana; 201 bushels per acre in Arkansas; 178 bushels per acre in Illinois; 146 bushels per acre in Nebraska; 144 bushels per acre in Ohio; 137 bushels per acre in Texas. Average of above 176 Bushels Shelled Corn per Acre. Iowa Silver Mine was again victorious at the Illinois State Fair, winning FIRST PRIZE with a crop of 207 bushels per acre. At the Peoria Corn Exhibition it captured more premiums than all other varieties collectively. Price, peck 40c. $\frac{1}{2}$ bushel \$1.25, 10 bushels or more \$1.10 per bushel. Bags free here.

PLANT SOME OF RATEKIN'S RELIABLE SEEDS THIS YEAR.

Description—Iowa Silver Mine.

Stalk grows to a height of about seven or eight feet, and sets the ears about three and one-half to four feet from the ground, just the right height for easy picking. One peculiarity we noticed in going over the field was that there were **No Barren Stalks**, every one had an ear, many stalks had two good ears, and the originator says that has been characteristic every year that he has grown it. The type is very even. Ears measuring from **Ten to Twelve Inches in Length** and weighing one and one-half pounds are often found. The ears are very uniform in size and shape, with sixteen to twenty straight rows (usually eighteen rows), of deep, pure white kernels set on a small white cob, and the ears are well filled over the tip. It is early, maturing in less than ninety-five days, and never has been caught by the frost. The cob dries out rapidly, so that it is ready for market **Earlier than any other White Field Corn** in existence. In its yield it will surpass all other varieties of White Corn. Seventy pounds in the ear will make sixty-two pounds shelled. It is adapted to a wider range of soil and climate than any corn ever offered. From Minnesota to Florida, from Massachusetts to California, it will yield a paying crop where other varieties are grown at a loss. It is in every way a distinct type of corn and possesses many of the features which have made "Pride of Nishna" so popular. It is hardy and a wonderful resister of drouth. Price by freight or express purchaser paying charges: Peck 40c, $\frac{1}{2}$ bushel 70c, bushel \$1.25, 10 bushels or more \$1.10 per bushel. Bags free on board cars Shenandoah.

Cass county, Iowa, Oct. 20. J. R. Ratekin & Son, Shenandoah, Iowa. Gentlemen:—Your catalog and circulars at hand. Accept my thanks for your kind remembrance. My health is still poor and while I am unable to look after affairs in detail. I drive about the farm every day, weather permitting. The seed corn I bought of you last spring was perfect. We planted our corn from the 18th to the 25th of May, fifteen acres on meadow sod and fifteen acres on stalk ground. Both pieces will yield from 70 to 80 bushels per acre, notwithstanding the terrible drouth we have experienced this season. Perhaps all the credit of our wonderful crop should not be given your seed corn, but undoubtedly is due to vanity and perfect seed. I am greatly pleased with the "Pride of Nishna" as well as the "White Silver Mine." I should be glad to visit your new seed plant, as well as my old-time friend John T. Stuart. Kindly remember me to him. Yours Truly,

Oliver Mills.

Office of Smith & Pickens, Livingston, Ala., Feb. 18th—Enclosed find N. Y. exchange in payment for 50 bushels of your "Iowa Silver Mine," white seed corn. Please ship at once and follow with a tracer as it is of the utmost importance that it comes through without delay. Ship by way of Birmingham, Ala. Smith & Pickens.

Lincoln county, Ark., Jan. 1—I am pleased to say that my corn crop grown from seed of your "Iowa Silver Mine," white, obtained from you last spring, made an average yield of more than sixty bushels per acre, shelled corn and was the best investment I ever made for seed corn. E. L. Ente. P. S. Dec. 6—Only a day or two ago we had inquiry from Mr. Ente for car load prices on our "Iowa Silver Mine" and "Imperial White."

Chickasaw county, Ind. Ty. August 26—I purchased some of your seed corn this year and am greatly pleased with it. Did not plant it until my other corn was two feet high and plowed once. The seed bought of you was planted on the poorest piece of ground I had; was never ploughed but once and produced fifteen bushels per acre more than native seed. I will plant nothing hereafter but your seed. Jas. H. Martesh.

Mahaska Co., Iowa, April 29—Seed corn arrived all right. Thanks for prompt attention. Vernie Welsh.

Cerro Gordo county, Iowa, May 10—Seed corn came all right and is very fine.

Jones Co., Iowa, April 18—Seed corn came yesterday. Thanks for your promptness. E. O. Gregory.

O'Brien Co., Iowa, April 16—Received seed corn. Please send price list of other seeds. L. J. Adair.

Erie Co., Ohio, March 3—Corn received. It is of fine quality and all right. N. H. Farnham.

Polk Co., Iowa, March 30—Seed corn received and am well pleased. H. Wallrabenstein.

Clarke Co., Iowa., Feb. 28. J. R. Ratekin & Son:—I received seed corn all right and find it better than expected. C. E. Comegy.

Chickasaw Co., Ia., J. R. Ratekin & Son:—Seed corn arrived in good condition and am well pleased with it. Jonas Hunt.

Marshall Co., Iowa, April 28. J. R. Ratekin & Son:—The seven bushels of seed corn received in splendid condition. Geo. R. Drewelow.

Marshall Co., Kas., April 27. J. R. Ratekin & Son:—Received seed corn today O. K. C. W. Smith.

Donley county, Texas, Oct. 3—I want a few bushels of your Turkish Red Wheat. I like your Silver Mine Corn fine. A number of my neighbors will send to you for seed next season. A. E. Graham.

adm.

"Ratekins' Imperial White Corn."

**A Great Favorite Wherever Tried
and Tested.**

This excellent and superior variety of corn has been grown here in the Nishna Valley of Southwestern Iowa for the past ten or twelve years with marked good results and uniform large yields. It was first introduced here from Illinois by an old German farmer, and on account of its many valuable and meritorious qualities, including its uniform big yields and its vitality to resist drouth and other unfavorable conditions it soon became a favorite with many of our largest farmers and best corn growers. By reason of this and after seeing it growing we have for the past five years been experimenting with it by sending out small quantities all over the country, gratuitous, to our customers who ordered seeds from us. This in order to thoroughly test the adaptability over a wide range of territory under all varying conditions including climate, soil and other things incident to our wide trade. There are many varieties of corn well suited to one locality that may be of little or no value in another place, but on the face of our observation we were so favorably impressed with this corn that we felt impelled to make a thorough trial and test of it in this way, and our judgment of it has now been proven correct, and last year, 1902, for the first time we catalogued it along with our other improved varieties, and especially all over the southern states, and we are pleased to say and to know that all reports from those who planted and grew crops from it are remarkably well pleased and shows a marvelous record as one of the hardiest varieties, surest croppers and best yielders that we have ever sent out.

DESCRIPTION

It is a pure white corn with red cob; a sign in itself of great vitality; ears measure from seven to eight inches in circumference and nine to twelve inches in length; 16 to 24 rows solidly set on a medium small cob, not unusually, and but solid and compact, and will weigh on from three to four bushels more shelled corn to the wagon load than ordinary varieties. Stalks strong and rugged and grow from seven to ten feet and sets ears about three and a half feet from the ground, and matures safely and soundly in ninety to one hundred days good corn weather from the time of planting.

It is a corn every farmer can plant with assurance always of a good crop of the best grade and quality of corn that is grown. It is especially well adapted to thin and old ground but will respond to good land and good cultivation second to no other variety in existence. Owing to the increasing demand for white corn, not alone in the United States but throughout all the world where corn is rapidly being introduced for its multiplicity of uses for food, white corn is destined to command, as it now does, a premium of two to five cents per bushel over yellow corn. Cereal mills the world over want white corn; to have it and to get it farmers must plant and grow it. Only a few years ago we were selling six bushels of yellow seed corn where we were selling but one of white. Now we are selling more white corn than we are yellow. Why is it? Because farmers have learned during the past few years that white corn not only commands a better price than yellow corn but withstands drouth and other unfavorable conditions much better than yellow

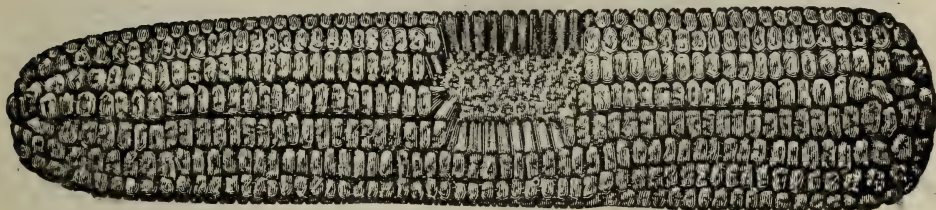


varieties. We cannot too strongly urge all of our customers who order seed corn from us this season to include in their order a few bushels of our "Imperial White." It is a sure cropper, big yielder, early to mature and an all-around field corn that you can always depend upon.

Price, peck 40c, half bushel 70c, bushel \$1.10. 10 bushels and more, \$1.00 per bushel. Bags free on board the cars here.

"RATEKINS' QUEEN OF NISHNA."

THE EARLIEST DENT CORN IN EXISTENCE.



"RATEKINS' QUEEN OF NISHNA" is without doubt the earliest dent corn there is in existence or that is anywhere grown, and is especially well adapted to northern climates where the seasons are short and where frost is expected early, also to the South where corn is often planted late in the season, after the small grain crop is harvested and taken off the ground. It supplies the place of the Mexican June corn in the south, and the extra earlies in Minnesota, North and South Dakotas, Wisconsin, Michigan, and New England, always maturing in 70 to 80 days, and even where any of the flint corns will mature.

"Ratekins' Queen of Nishna" resembles very much the "Pride of the North." By careful selection and improvement by planting only from the best strains, and from stock grown especially for seed purposes, with the utmost care, we claim our stock superior quality: in earliness as well as in yield and quality of product. In fact, we have used every known method in breeding this corn up to obtain all the essential points of highest standard known in the perfection of an extra early variety of field corn, for the extreme north, as well as to supply an extra early corn for the central, western and southern states.

DESCRIPTION

The ears run from seven to ten inches long with 14 to 18 rows, usually about 16 rows, very deep compact grains, solidly set on a very small red cob, and yields from 30 to 50 bushels per acre; our seed crop this season was unusually fine, and yielded strong Fifty Bushels Per Acre. We have sold hundreds of bushels of this corn all over North and South Dakota and Minnesota, and it has given remarkable good satisfaction and yield. In 1901 we sold one large farm company in North Dakota 60 bushels of this seed for their own planting purposes, and another land company 50 bushels, besides hundreds of smaller orders, and without exception they obtained the best of results, and many of them have since given us large orders for other seeds, on the strength of results from this seed corn. It's the corn for the North and for the South, and the corn to plant everywhere where early varieties are wanted for any purposes. We cannot too strongly commend it to our customers and to the farmers everywhere where you want an extra early variety, it's the corn to plant. Price \$1.50 per bushel. 10 bushels and more \$1.25 per bushel. Bags free on board cars here.

Ratekins' Extra Early White Corn.

This corn is exactly the same type of corn as our "Queen of Nishna," and is equally as early, maturing in from 70 to 80 days from planting time and is in great request and demand everywhere for grinding and mill purposes, early in the season and before other field varieties are dry enough to grind into corn meal. It will bear planting somewhat closer and thicker than later and larger varieties, thus it often yields almost as much as the larger sorts, besides every pound of it is as solid as lead, our crop this season yielding full 50 bushels per acre. Price per bushel \$1.50. 10 bushels and over \$1.25 per bushel. Bags free on board cars here.

In 1902 it Did Better than Ever.

WATERLOO, IOWA, Jan. 2.—Messrs. J. R. Ratekin & Son. Gentlemen:—I wrote you last year in regard to the seed corn, and results from it, that I bought from you in 1901. I am pleased to say that results were even more satisfactory than last year, as I grew seventy bushels per acre of your "Pride of Nishna" this year of as sound and well developed corn as was ever produced in any season and when husked, by the bushel as it was, it weighed out more bushels than by measure. I have often heard farmers talk about every stalk producing at least one big ear, and sometimes two, but I never before found any other variety that would do that well for me, but I have found the corn I got from you to be an exception and it is no exaggeration when I say that this is one characteristic of your "Pride of Nishna." Every stalk bears one good ear and many of them two well developed ears of good sound corn. Wishing you every success and a happy and prosperous year, I am, Very truly yours,

H. J. Lichty.

Stowell's Evergreen Sweet Corn.



large or small, to plant a few acres of Stowell's Evergreen Sweet Corn the coming season. There is nothing that will produce more, nor as good forage and fodder, as it will. Stock will eat every vestige of it, including the stalks, as clean as they will the best clover hay. It will not disappoint your best expectations and everything will smile and grow fat that you feed it to, from the family table to the pig pen. Price per lb., by mail postage prepaid, 25c, 3 lbs. 60cts. By freight or express at your expense peck 75c, half bushel \$1.40, per bushel \$2.50, bags included.

Evergreen Sweet Corn, we say unqualifiedly is one of the most valuable fodder plants in existence and all stock farmers, whether on a large or small scale, should devote from one to ten acres of ground to the cultivation of this superlative crop. The stalks are sweet, red, juicy, tender and very nutritious. The leaves, which are very numerous, are large, broad, succulent and greatly relished by all kinds of stock—it being greatly superior in every respect to other sorts of corn. On strong, rich soil it will grow 10 to 12 feet high and produce an incredible amount of fodder which, when cured, is equal to hay and relished by all kinds of stock equal to the very best clover hay. We have here one of the largest, if not the largest canning factory to be found in this or any other state, where sweet corn is canned, and owing to the excellency and wonderful yield of roasting ears it is planted to the exclusion of all other varieties. The canning company paying five dollars per ton for the corn in husk at canning time it makes a very profitable crop even at this price, often yielding five to six tons of roasting ears per acre or \$25 to \$30 per acre for the product, besides the stalk fields alone often sell at two dollars per acre after all the corn is gathered, when stalk fields, where common field corn was grown, sell for 40 and 50 cents per acre. Stock love it so well that they will eat the dry stalks so clean there is not a vestige left that you would know the ground produced a crop of corn. This variety is decidedly and by all odds the largest and greatest producer grown. We measured ears of this which were selected for our seed this year that measured 12 inches in length, and you can always rely upon every stalk producing at least one good ear, and fully forty or fifty per cent having two and even as many as three good ears on them. It will bear planting a full half thicker, or even more than ordinary field corn, but it is rather more sensitive to cold, wet weather about growing and giving a good stand and should not be planted before the prime time for planting other corn, and then only when the ground is in good order.

If planted exclusively for fodder and forage, set your planter so that by double rowing it, that is after planting once, straddle the rows again with planter and plant at the rate of one bushel per acre. Some people sow in drills with wheat drill, while others sow broadcast at the rate of 1½ to two bushels per acre. We cannot too strongly urge every farmer, either

POP CORN=Leading Sorts.

Pop Corn should be found in every garden, and on every farm, especially if there are any children, to enjoy it during the long winter evenings, which bring young people together for social amusement. It is a fact not generally known that pop-corn pops best when more than a year old, and that when popped it becomes twenty times its natural size; thus a quart and a half will make nearly a bushel when popped in an ordinary 10 cent popper that can be bought at any hardware store.



QUEEN'S GOLDEN.



MONARCH WHITE RICE.

Queen's Golden One of the very best and most profitable varieties grown. Its quality and handsome appearance when popped are very noticeable. It pops perfectly white, and a single kernel will expand to a diameter of nearly one inch. The stalks grow 6 feet high, and the large ears are produced in abundance. Mr. Queen, the originator, says: "It is so far ahead of all others that I have seen or tried as to be beyond comparison in every respect especially in yield, in sturdy growth, in size and in color when popped—being of a delicate golden yellow." Pkt. 5c. ½ pt. 25c.; qt. 40c.

Maple Dale Prolific This remarkable variety originated with Prof. R. L. Wetherell, of Davenport, Iowa, who states: "I selected on my Maple Dale Fruit Farm the stalk, one stalk having 19 ears." The stalks grow 6 feet high and the ears are all large in size, with grains nearly clear white in color. An average ear measured 7½ inches long and contained 585 perfect kernels. Pops pure paper white, of fine quality. Be sure to include this remarkable variety in your order for Pop Corn. Pkt. 5c.; ½ pt. 15c.; pt. 25c.; qt. 40c.

White Rice This is a well known standard variety and the leading sort in all the markets; it's the pop corn that always pops, and the best variety in existence; also the best yielder. Our stock of this is extra selected ears, fully six inches in length and lots of them on each stalk. Pkt. 15c. ½ pt. 15c. pt. 25c. qt. 40c. Postage prepaid.

SEED OATS.

Our Seed Oats for this season's trade were all harvested, stacked and threshed without rain, and quality is very fine, and we feel sure that our customers will make no mistake in ordering their seed from us. There is nothing grown, not even potatoes, that will so readily respond to a change of climate and soil as Oats, and nothing so profitable as sowing but the best, newer improved varieties. Our seed is thoroughly re-cleaned and graded, and are absolutely free from noxious weed seed, trash or other particles of any kind. They are SEED OATS.



Ratekins' New Sensation Oats

Are the kind to grow for sure croppers. Our Sensation Oats are noted for vigorous growth, and rust does not effect them as much as less vigorous varieties. The grain is large, white, plump, with thin hull, running over weight often 8 to 10 pounds; we unreservedly recommend our Sensation Oats.

They will yield 60 to 80 bushels per acre in ordinary farm cultivation and more under favorable conditions. We don't ask you to base your hopes on 200 to 1,000 bushels per acre as you will see claimed in some catalogues, we believe we are dealing with intelligent people and they realize such yields are impossible. We aim to gain and hold the confidence of the farmers everywhere. We should be pleased to have you devote part of your farm to our Sensation Oats; it will pay you.

Who would rather grow a pure, true heavy oat in preference to the mixed, light, chaffy kinds grown on some farms? It's time to look to quantity and quality; sow good seed and you will reap a good harvest. When you sow our Sensation Oats you have an insurance policy on your crop. We make it possible for every farmer to get some of these oats by making the price as low as possible. Order them early and secure some of this seed. Price, $\frac{1}{4}$ bushel, 50c; bushel 80c; 5 bushels or more 70c.

The New Lincoln.

First introduced in 1893. Has stood the test very well and proven to be an excellent variety. No variety has ever had such a boom in advertising as the "New Lincoln," and was introduced in Minnesota with wonderful success. It has done well here, and we have raised it since its introduction with very good results. It is very productive having in all instances yielded more to the acre than any of the standard varieties, in one case yielding 174 bushels from a single bushel of seed. It is very early and thus far proven itself rust-proof. It stands up remarkably well. On account of its thin hull, heavy meat and soft nib, it is a desirable variety for feeding. For oatmeal or grinding it is exceptionally valuable. Choicest stock feed. The above is a description from the originator. We will say that this is a very good oat and has, as is stated, stood the test well. We have grown it for several years past, and it has done well and it is a splendid variety and to those who want that kind will guarantee it genuine and pure. Price $\frac{1}{4}$ bu. 35c, 2 or more bu. 40c, 25 bu. or more 50c. Bags free.

Our Improved Mammoth White Russian Oats.

Mammoth White Russian oats are a white oat; grow vigorous and with a very strong, stiff straw, almost absolutely rust proof. They are always sure croppers and make more big bushels per acre than any other white oats in existence. They are oats every farmer should plant or grow. Our seed of these oats are of an excellent and superior grade and quality, all cleaned and sacked in our two bushel bags. Such seed are worth twice the price we ask for them, as compared with the ordinary sorts even if you could obtain them as a gift. **Now is the time to order your seed then you will have them when you are ready to sow, and you will not have to sow some common or inferior sorts. Order today.** Prices, bushel 60c, 10 bu. lots 50c, 50 bu. lots 45c. Bags free.

Early Champion White Oats.

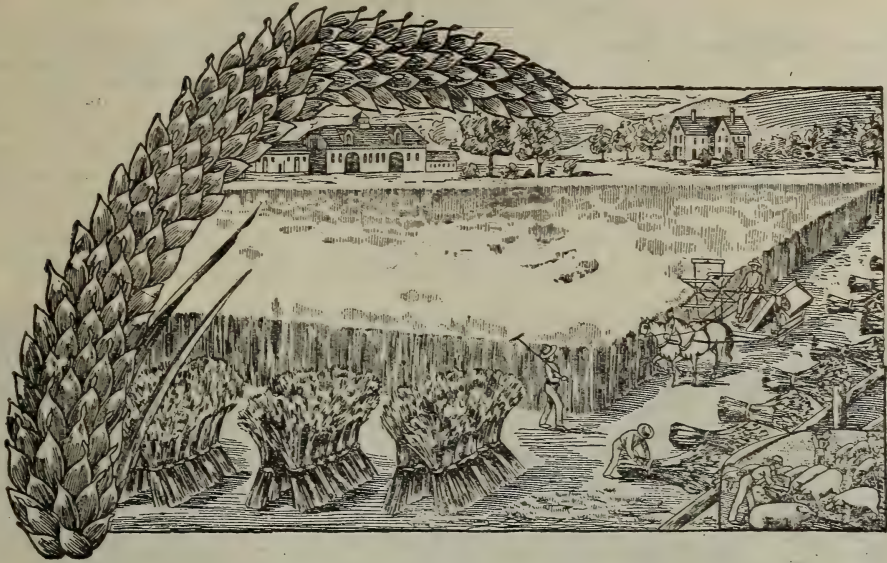
The Early Champion are without doubt the earliest variety of oats to mature that there is in existence, are of short stiff straw, always standing up well on the richest soil, and these two reasons make them the most desirable nurse crop in existence to sow with grass or clover. In addition to superior quality already named they are among the largest yielders and surest croppers. In fact they have given the largest yield in field tests at the Iowa Experimental Station, and are highly recommended by that station as superior to any other variety on points named here. You will make no mistake in sowing largely of this variety for field and general crop; they always get there before rust gets other sorts. Prices, bu. 60c, 10 bu. 50c, 50 bu. 45c. Bags free.

Red Rust Proof Oats.

Called by some Texas Red and a valuable acquisition to the varieties of oats we have to offer, and one that a large number of farmers in all parts of the country are so favorably impressed with. They get such good results they sow no other kind, being a stiff straw and an early oat, also extremely hardy. It has short spikelets or beards on it which protect it from the extreme hot sun, and are sowed in the south more than any other variety. It does remarkably well with us here and some of our customers whose crop we handle received as high as 40 bushels per acre and this was an off season for oats. In the beginning of the season we shipped thousands of bushels of oats to the south, mostly to Tennessee, where the crop was cut short, and they had to look to the north for their seed. We have a nice stock of this valuable variety and take pleasure in offering it to our many customers as something of real worth and great value. A prominent thresherman of a neighboring town told us he got so tired of threshing poor light oats that he determined to see if he could not improve this crop, so he procured two cars of these Texas Red Rust Proof Oats and put them among his patrons, charging them just what they cost him, while he was put to extra expense in the way of finding and unloading them. He did this in order that he might get a crop of oats to thresh and the result was that it went far beyond his expectations, and it made him a friend to the entire community where those oats were produced. They produced as high as 60 bushels per acre while common oats did not yield over 30 or 35 bushels per acre. The seed we offer is from these. Price, 1/4 bu. 35c., 1 bu. 65, 2 bu. or more 60, 10 bu. or more 55, 25 bu. or more 50c. Bags free.

Iowa was first last year in the production of oats and raised more oats than any other state in the Union. She is great in all crops, but strong in corn, oats and barley and the seed produced here has the name of being excellent and always commands the highest price on the market for seeding purposes. We are fortunate in having several varieties and though the yield was not as large, per acre, as many years, the crop makes up in quality what it lacks in quantity. We have never seen oats in better condition than the ones we have procured from our growers for seed. We consider them much above an average and have laid in a very large supply for seed and know that we have something in this line that is extra fine. One of the first necessities in producing good crops of anything, and especially of oats, is good seed. Oats, like other seeds, will run out in constant cropping on the same farm and a change is necessary.





Success Beardless Barley.

The earliest barley known. The straw is about the height of the common barley, but better, and will stand up on any land; with good land and season has produced 80 bushels per acre. Sow as early as you can; frost does not hurt it. Many farmers will not raise barley on account of the long harsh beards which are so disagreeable in threshing, although it is a profitable crop. This is beardless and as easy to grow and handle as oats. It has hulls like the Manshure or any other variety, and is a heavy cropper, yielding from 50 to 75 bushels per acre, and the quality is excellent both for malting and feeding hogs and other stock. Per lb. 20c, 3 lbs. 50c. By freight, per peck 30c, bu. \$1.00, 2 bu. or more 90c, 10 bu. or more 85c. Bags free.

Manshure Bearded Barley.

This is an old well known six-rowed variety introduced by Professor Henry, of the Wisconsin Agricultural Experiment Station eleven or twelve years ago. Since then it has been the standard and most popular barley ever introduced. It has been worth millions of dollars to the farmers in the barley growing states. It is a barley of wonderful productiveness and is not surpassed as a heavy yielder. Its malting qualities are unsurpassed, and on this account always commands the highest market price. It ripens early and has strong, stiff straw, with long and heavy heads, filled with plump, nice kernels, which are of a pretty bright color, and will not discolor from wet weather. Barley is in better demand than it used to be, and even at a moderate price it is a good and profitable crop to grow. The Manshure barley yields in ordinary seasons 60 to 65 bushels per acre, and in favorable seasons has yielded as high as 80 bushels; figuring only 45 to 50 cents a bushel, it is one of the best paying crops. 1 lb. 30c, 4 lbs. 75c, by mail. By freight or express, $\frac{1}{4}$ bu. 50c, 1 bu. \$1.00, 10 bu. or more 85c per bu. Bags free.

Ideal White Hulless Barley.

And it is an ideal that pleases all who try it. The heads are large and well filled with big plump kernels, which are hullless and a great value for feeding. Those who have grown it say that it produces a very much larger crop than any other variety. It weighs 60 to 65 lbs. to the measured bushel, while ordinary barley weighs only 48 lbs. The straw is very stiff and strong. It is the handsomest, most productive and the best variety we know of. Per pkt. 5c, lb. 30c, 3 lbs. 75c, postpaid. By freight, per peck, 75c, bu. (48 lbs.) \$2.00, 2 bu. or more \$1.80.

Seed Flax. A very profitable crop and it pays to own your seed. Price subject to market changes. Per lb. 25c, 3 lbs. 60c. By freight peck 65c, bu. \$2.15 Ask for price in quantity.

Speltz. Speltz is a new grain and looks more like Barley than anything else, and we have placed it among the varieties of Barley. It is somewhat between a wheat and a barley. The grain is somewhat similar to rye when the hull or husk is removed. It is a most wonderful grain and has been introduced extensively into this country in the past few years, and has proven of great value. For centuries past it has been grown in western Russia near the Caspian sea, and its value was not known any where else until recent years. Some years ago an emigrant from there brought some to this country. This was in Dakota, where it is grown on a large scale now and takes the place of corn to a great extent as a feed for horses, cattle and hogs. Dry weather has no effect on it. We have grown it here in this climate and the result has been entirely satisfactory. It is planted in early spring similar to wheat and oats, requiring about $1\frac{1}{2}$ bushels per acre. This is a great success for producing very satisfactory yield and can be grown very cheaply. Why not grow some? We believe that it will grow most any place in the corn belt and as far north as wheat will grow. Price, 1 lb. post paid, 25c, $\frac{1}{4}$ bu. 40c, 1 bu. \$1.10, 2 or more bu. \$1.00 per bu, 10 or more bu. 90c per bu. Bags free.

Spring Wheat.

Velvet Chaff Spring Wheat This is now the standard in Iowa variety for growing, having displaced all the other sorts. It has proved much superior to the Scotch Fife, Saskatchewan and other sorts, being fully equal in quality, earlier, more sure, and yielding much larger crops. It is a remarkable semi-hard spring wheat yielding large crops free from rust. It is now the main crop in the northwestern states and the great milling kings use it for their highest grade flour, and it has been the most reliable variety year after year, yielding a good crop where other kinds fail. All stocks of this variety show some mixture, but our seed is nice this year and we are sure will please our customers. Per lb. 20c; 3 lbs. 50c. By freight, peck 35c; bu. \$1.25; 2 bu. or more at \$1.15; 10 bu. or more at \$1.00.

Blue Stem Wheat. The Velvet Chaff or Minnesota Blue Stem spring wheat does the best throughout the spring wheat growing country. It is a remarkable semi-hard spring wheat, yielding large crops and is free from rust. Our millers pay more for it than for any other sort. It is fully equal to the old Fife wheat and yields a very much larger crop. Our seed this year is very fine and we are sure it will please our customers. It is re-cleaned and graded and you will find it absolutely free and clean, clear from all oats and other noxious seed. Price per pound 20c; 3 lbs. 50c. By freight, bags free aboard the cars here, per bu. \$1.25; 5 bu. or more at \$1.20, 10 bu. or more at \$1.15.



WINTER WHEAT.

When you are interested in Fall or Winter Wheat, write for OUR SPECIAL Winter Wheat Catalog, giving full description of our well known varieties. Will be out of print about Aug. 1st. Mailed for the asking.

Rye. This is great for winter and early spring pastures and then cut a crop for grain. We offer choice White Rye, which is much superior to the old dark colored varieties, as follows: One bushel 75c; 10 bushels lots or more 65c per bu. Bags free.

FIELD PEAS.

SOUTHERN COW PEAS.

Field peas are largely grown in the Southern States, both as a hay crop and a fertilizer, in which respect they are of great value. The peas may be sown in corn at the time of last cultivation; or after a crop of early potatoes. They may be sown broadcast at the rate of one and one-half bushels per acre, or they may be planted in rows about three feet apart with a cornplanter. This will require about one-half bushel of seed per acre. The cow peas, by their rapid, rank growth, keep down weeds and put soil in good, friable condition for the next year's crop, increasing the fertility of the soil to a remarkable

extent. The vines furnish an excellent green food for milch cows until frost, or they may be cut and cured for hay; or a very profitable way to dispose of the crop is to turn hogs into the field at the time the first peas are ripening. They readily eat the foliage and well filled pods, and thrive amazingly. Or the entire crop may be plowed under as a green manure.

Whippoorwill—An early variety, and the favorite in this section. Peck 75c, bu. \$2.50.
Clay—A rank and rapid grower, but later than the Whippoorwill. Peck 75c, bu. \$2.50.

Farm Seeds.

At the prices quoted here we make no charges for bags or cartage. The prices quoted are subject to market fluctuations. Should any seeds seem high, or when customers are in need of large quantities, we will be pleased to quote them, on application, the Lowest Prices that the market will justify at any time. Please state quantities when writing for prices.

Early Amber Cane.



Amber Cane in recent years has attracted great attention as food for live stock, and is now recognized for its great value and adaptability as such. Its great merit as a food has become known and is here to stay, being very generally known and appreciated. The demand is increasing more and more every year and each year ten fold more than the last. It is profitably grown everywhere, from Manitoba to Mexico, on any good corn land and is not affected by drouth as other crops are, but produces wonderful forage crops rain or shine. As a fodder plant it is the most productive and economical plant in existence, and of the very best quality. Being sweet, tender and nutritious, it is greedily eaten by cattle, horses and hogs. Dairy men find that cows give more and richer milk from its use than any other food, and it is claimed by some that as high as twenty-five, thirty and even fifty tons of the green fodder have been grown from an acre. It can be cut several times during the season if not allowed to grow too large or high, and make good, sweet hay. Sow 100 lbs. per acre for best results. Price per lb. postpaid by mail 15c; 3 lbs. 50c. Write for prices on large quantities. As cane is subject to market changes, we will always quote you lowest prices.

Kaffer Corn.

Kaffer Corn is an excellent plant for fodder, yielding two crops during a season. It grows from four to six feet high, making a straight, upright growth. It has a stalky stem with numerous wide leaves and heavy foliage. The stalks keep green and brittle, not hardening like other varieties of the sorghum plant, making an excellent

fodder, either green or dried, which is highly relished by cattle, horses and mules. The seed crop is also very heavy, sometimes yielding from 50 to 60 bushels to the acre. For fodder, sow 25 to 50 lbs. either broadcast or in drills. Pkt. 50c; bu. (50 lbs.) \$1.50; 2 bu. or more \$1.25.

Broom Corn.

IMPROVED EVERGREEN.—For length, strength and straightness of brush this variety is unexcelled. It is of light green color without the slightest reddish tinge. It makes far the best brooms of any grown. Height, 7 to 8 feet. Price, by mail, postpaid, 30c per lb., by freight, ¼ bu. 60c; ½ bu. \$1.10; 1 bu. \$1.75.

DWARF EVERGREEN.—This is a popular variety on account of its not being so liable to blow down and lodge as the taller varieties. Heads are very bushy and make a fine yield. Price, by mail, postpaid, 30c per lb., by freight, ¼ bu. 60c; ½ bu. \$1.10; 1 bu. \$1.75.

Mangels and Sugar Beets

Extensively grown in all parts of the country for feeding stock. Sow in April or May, in drills three feet apart and thin to ten inches in the row. If your soil is deep and mellow, try the long varieties; if shallow the round kinds will do better. No crop pays the farmer or stock raiser better than mangels; 1,000 bushels to the acre is an ordinary yield, while with good culture 2,000 bushels and over have been grown to this amount of ground. These make the cheapest of foods for all kinds of live stock—horses, cattle, pigs, sheep, chickens, etc. Easily grown and they help to keep stock in good condition and free from disease. Dairymen claim that a bushel of mangels and a bushel of corn are worth more than two bushels of corn. Use 3 pounds of seed to an acre.

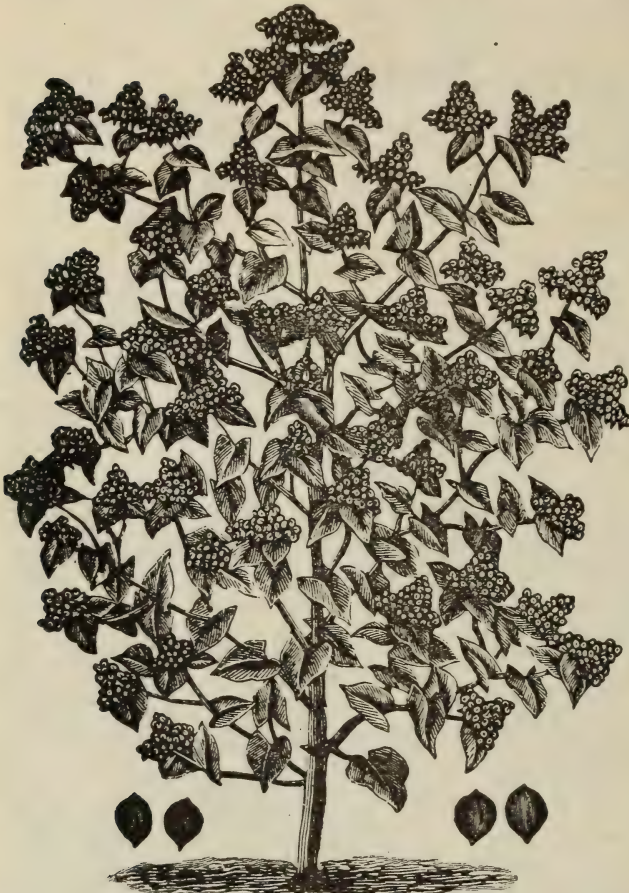
GOLDEN TANKARD.—The popular variety. Roots are smooth, of very large size, and of excellent quality. Is a splendid keeper and we heartily recommend this strain of Golden Tankard to all. Price, oz. 5c; ½ lb. 15c; 1 lb. 40c; or 5 lbs. for one acre, \$1.70.

MAMMOTH LONG RED.—Like the above except color. Price, same as above.

IMPROVED SUGAR.—This kind is cultivated on a much larger scale than any other variety of Sugar Beet. The root is conical, straight and even, quite large at the head and tapering rapidly. It is easy to dig, a heavy yielder and contains from 13 to 15 per cent of sugar. Price, Pkt. 5c; ¼ lb. 20c; 1 lb. 35c.



BUCKWHEAT.



Should be sown about the middle of June, broadcast, using from 1 to 3 pecks of seed to the acre.

New Japanese. This new sort has proven to be much earlier and more productive than any other variety. Grains very large and of a rich brown color. It excels all in yield and earliness. Postpaid, lb. 25c; 3 lbs. 60c. By express or freight, peck 40c; bu. \$1.35.

Silver Hull. A very good and popular variety. The grain is of a light gray color, is rounder than the common variety, has a much thinner hull, matures earlier and yields a half more to the acre. Postpaid, lb. 25c; 3 lbs. 60c. By freight or express, peck 40c; bu. \$1.35.

Bromus Inermis.

Defies Drouth. Resists Frost. Best Grass of the Age.

It converts waste and barren land into a thing of beauty and profit and adds greatly to the profit of valuable land. The introduction of *Bromus Inermis* means millions of dollars added to the wealth-producing power of this country. It is a native of Russia, and on the great prairies there this marvelous grass thrives luxuriously. It stands year after year in good soil, yielding enormous crops of excellent hay and furnishes rich and abundant pasturage. *Bromus Inermis* is an inestimable boon to countries where clover, timothy and other grasses yield a light and decreasing crop of hay. It is thoroughly established and is not an experiment, but is unquestionably a success as it out yields alfalfa and cattle relish it. One sowing will stand for 10 years. It grows very thick and so dense that it will "hold up your hat" and will completely eradicate all obnoxious weeds, such as Canadian thistle, wild mustard, cockleburrs, etc., in three years time. It is introduced and recommended by the very highest authorities on these questions, so there is no mistake about it.

Experimental Grass Station, Garden City, Kan., says: "We have grown *Bromus Inermis* successfully and think it to be the coming grass for the arid regions of the west. We sowed it about April 1, here."

S. M. Tracy, Director Mississippi Experimental Station, says: "*Bromus Inermis* endures the summer heat and drouth much better than the Rescue Grass, and being a perennial is much more permanent. Like nearly all grasses it makes the best growth on rich soils, but even on thin and barren soils it is one of the best. Seed is produced sparingly and is hard to obtain in this country."

Prof. W. M. Hays, Agricultural Experiment Station, Minnesota, says: "We have had a great many reports from persons who have tried this grass, and the consensus of opinion is that we have in *Bromus Inermis* a most valuable addition to our agricultural plants."

Prof. Thos. Shaw, who is highest authority, says: "This grass cannot be obtained too soon by the farmers of the northwest and arid regions. It is very hardy, endures very low temperature and possesses great power to grow in dry climates. It is well adapted for hay and pasture. The grass comes up quickly in the spring, makes rapid, strong growth, and after it has been cut for hay makes abundant pasturage."

W. J. Spillman, Professor of Agriculture, Washington Agricultural Station, says: "We have had 5 years experience with *Bromus Inermis*. We find this grass to be well adapted to the wheat soil in this section of the country. When sown in early spring it makes considerable pasturage in the fall and a large yield of hay the second season, provided it is not pastured too closely the first season."

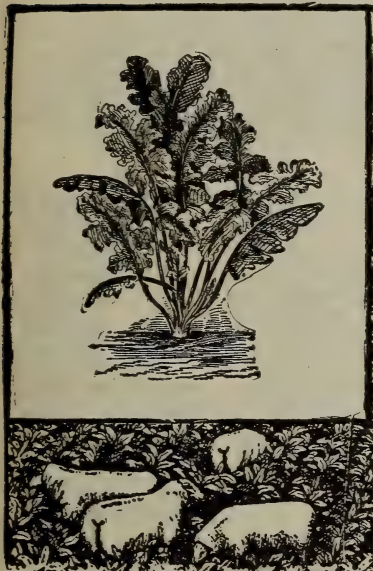
J. H. Shephard, Professor of Agriculture, N. D. Agricultural College, Fargo, says: "As a pasture it is preferred to timothy by cattle as shown by a trial where it was fed off more closely than timothy in the same pasture. It has the advantage of being earlier and being green until late in the fall. The fact that *Bromus Inermis* resists drouth better than other cultivated grasses greatly adds to its value in this country."

The editors of the following agricultural papers comment very favorably upon *Bromus Inermis*: Orange Judd Farmer, Chicago, Ill.; Prairie Farmer, Chicago, Ill.; Northwestern Farmer, St. Paul, Minn.; Dakota Farmer, Aberdeen, S. D.; Nebraska Farmer, Omaha, Neb.; Kansas Farmer, Topeka, Kan.; Homestead, Des Moines, Iowa; Wallace's Farmer, Des Moines, Ia.; Breeders' Gazette, Chicago, Ill.; and many others. Could there be any better proof of its value than this?

How to Sow. Plow the ground thoroughly in early spring, harrow well and sow in April or May, depending on the location. 15 lbs. per acre of the seed we offer is sufficient, as it is very strong in germinating power, while there is much seed on the market of poorer quality and it takes more to produce a stand. Harrow lightly and it will show up for pasture in the fall and will make a splendid crop of hay the following year. We have obtained a good supply of this very best seed that grows and of the new crop, and we are contented with a small profit and do not put it at an exorbitant price. Just a word about quality:—A number of seed houses claim to be the introducers and the only ones who have the genuine article, but to all thinking persons it is plain that such talk is "bosh," as no seed firm has a monopoly on anything for as soon as put out it becomes public property. In the case of *Bromus Inermis* it was simply imported and is an old established grass of Russia and some of the older countries. All the seedsmen had to do was to send for the seed, so any seedman can obtain the seed from where it originated or buy it in this country where it is raised for seed and is increasing very fast in seed-producing habit. We defy any one to produce better seed than we offer. Price, 1 lb. by mail, postpaid, 25c; by freight, 10 lbs. 16c. per lb; 15 lbs., enough for 1 acre, 15c. per lb; 100 lbs. 14c. per lb; 200 lbs. 13c. per lb. Bags free.

DWARF ESSEX RAPE.

The Most Popular and Profitable Forage Plant in Existence.



The demand for Dwarf Essex Rape is increasing four-fold every year and everywhere it gives the greatest satisfaction. It is easily grown everywhere and is unsurpassed as a forage plant for hogs, cattle or sheep. They eat it greedily and seem to prefer it to any other pasture during the summer and until late in the fall or early winter. Can be sown early in the season to provide early pasture for sheep and swine; or sow in small grain a week or so before cutting to provide pasture after harvest; or sow on the stubble; but it is usually sown in June, July or August with corn or potatoes, or on well prepared land alone for summer and fall pasture. Makes a wonderfully productive pasture for Sheep, Hogs or Cattle, and they gain flesh so rapidly that they soon "weigh like lead." While it is the ideal food for sheep, still it is of equal value for hogs and cattle, as they are very fond of it, it is extremely cheap, having yielded 20 tons of fodder per acre. In the east it is usually sown in drills, 2 or 3 pounds per acre, and cultivated, but in western states it is almost invariably sown broadcast, 4 to 5 pounds per acre, and it grows so rapidly that all weeds are quickly smothered. When it is sown as a secondary or catch crop after small grain has been harvested, it is well to disc the ground thoroughly immediately before sowing. The United States Department of Agriculture claims that it adds greatly to the fertility of the soil for the following grain crop. One Nebraska farmer says that he sowed only three pounds per acre on a four and one-half acre field, and five weeks after sowing he turned eighty head of hogs and forty pigs into the field, and they pastured there constantly until October. The plants grew so rapidly that at no time could he tell where the hogs had been, twenty feet away from the gate. Our stock is the TRUE DWARF ESSEX, imported by us in car load lots direct from the best grower in England. Beware of low prices on rape seed this year, as some unscrupulous dealers last year substituted German rape which can be sold at less than half the price, but it goes quickly to seed and is worthless for forage purposes. Every one of our customers was pleased last year.

Price, 5 lbs. 50c; 10 lbs. 85c; 25 lbs. \$1.75; 100 lbs. \$6.50.

Clover and Grass Seed.

Prices subject to fluctuations. Market prices on application. We pay particular attention to this department of our business. These seeds are selected with special reference to their quality. Purchasers may rely upon our best endeavors to furnish Grass and Field Seeds pure and free from noxious and foreign seeds—has not laid in bins until it became heated or musty—all reclaimed with the best machinery to make them choice. On account of the fluctuations on these seeds from day to day, it is impossible for us to establish a fixed price, but purchasers may depend on buying them as low as best quality can be sold for at date order is sent us, and that we will always send as much seed as money received will pay for. Market prices of the day or special prices on large quantities cheerfully given on application. Express or freight charges always paid by the purchaser, except when sufficient money is sent to pay charges. Bags 15c extra.

Clover Seed.

For many years we have made this a specialty, and now have our new machinery for cleaning so perfected that we claim that our grades average better than those of most other markets, and believe that they cannot fail to please the most particular. Other seed dealers who have happened to be in our warehouse when we were cleaning clover, have often remarked that the seed looked so nice that they should not reclean it. From these same lots of seed we were cleaning out three to five pounds per bushel of trash, sand and shrunken clover seed. This makes quite a difference in real value, and our seed is really worth ten cents to \$1.00 per bushel more than that obtained from most dealers. Crop is short this year. Prices on clover and grass seeds are changing almost daily, so that we are unable to quote prices which will be invariable. Don't fail to write for prices before buying. We issue a price list each week from January to June. If you are in a hurry for seed you can order it and we will send seed to full value of money sent on day order is received. The following are the prices we are selling at on the date this catalog goes to press, January 10, 1902. We pay postage at the one and three pound rate, larger quantities shipped at purchaser's expense. Trial packets of any variety at 5 cents each.

MEDIUM RED CLOVER.

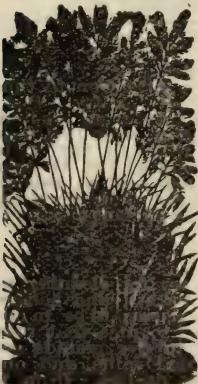


Medium Red CLOVER.

Alsike Clover



ALSIKE CLOVER



Timothy grass, well known to every farmer, stands at the head of all other tame grasses for hay. We are located in a fine country for Blue Grasses, Clover and Timothy, and supply purchasers with the very best quality of seed. Iowa grows more Timothy seed than any state or part of

This is the most important of all Clovers, and the standard everywhere, for hay and pasture. It is also known as Common Red or June Clover in many sections. Our Iowa grown clover seed has become widely known for its purity, strong vitality, hardiness, vigorous and healthy growth, and stooling qualities, so that now we receive many orders annually from the most distant parts of the United States, and also from foreign countries. It has been tested by the Agricultural Experimental Stations in various parts of the country and ranks among the highest everywhere. We have many customers in Pennsylvania, New York and other parts of the east, who purchase from us annually, although our seed costs them more, freight considered, than the eastern grown. You will find that it does not pay to buy inferior seed containing a mixture of weed seed, dirt, sand, shrunk clover, etc. It pays to have the best. Sow 15 lbs per acre. Postpaid lb. 25c; 3 lbs. 65c. At buyer's expense, 1-2 bu. \$4.00; bu. \$8.00.

Mammoth Red Clover.

Also called Sapling or Pea Vine Clover. This greatly resembles the Medium Red, but is of much taller and more vigorous growth. The stems are so large and coarse that it is not valued for hay, but nothing equals it for hog pasture, as it will produce an enormous yield and is of the highest feeding quality. It gives very quick results, making an unequalled crop and is usually considered a permanent pasture grass. If your soil is poor and needs enriching, there is no fertilizer as cheap and good as sowing Mammoth Clover and plowing the crop under. It is the clover for poor soils. Sow 15 lbs to the acre. At buyer's expense, $\frac{1}{2}$ bu. \$4., bu. \$8.

This is the hardest of all the clovers and never winter kills, even in our severe winters. It adapts itself to all kinds of soils, and is capable of resisting extremes of wet and drouth alike. It makes a better and finer hay than red clover and is much relished by stock. (60 lbs per bushel.) Per lb. 30c., bu. \$15.

White Clover

Extra choice seed for lawns. Per lb. 30c; 5 lbs. for \$1.50.

Alfalfa or Lucerne Clover Very popular in many portions of the country. Under proper management it will yield from ten to twelve tons to the acre. All classes of stock are exceedingly fond of it. The roots are so long and grow so deep, frost cannot heave or throw them out in winter. One sowing will stand for twenty years, and instead of impoverishing the soil, enriches it. Grows on the thinnest sandy soil and thrives in greatest drouth. Sow broadcast, about twenty-five pounds to the acre. Comes up spindling and slowly and it is necessary to mow the weeds to give it light, but when once established the weeds will be smothered. Postpaid, per lb. 30c; 3 lb. 75c. per peck \$2.50; per bushel \$9.00.



ALFALFA or Lucerne CLOVER.

GRASS SEEDS.

Kentucky Blue Grass.

Very valuable and exceedingly popular in some sections of the country as a pasture grass. It is productive and unusually early in spring, furnishing delicious food for all kinds of stock. It is not easily affected by frost or drouth, is suited to a great variety of soils, succeeding best on a moist, rich meadow. For permanent pastures it is particularly valuable, being of dwarf growth, therefore not so well suited for meadows. Unexcelled for lawns. Our seed is all new crop, best grade, 'Fancy Cleaned.' Sow 14 lbs. per acre for pasture, or 60 to 100 lbs. for lawns. Per lb. 30c; 3 lbs. 75c; bu. (14 lbs.) \$2.25.

Meadow Fescue or English Blue Grass

Succeeds well in almost all soils, from high, dry land to moist, standing the dry summer heat excellently. It is valuable as pasture grass, being one of the earliest in the spring and latest in the fall. It is very nutritious and greedily eaten by all kinds of stock, and very fattening. Is hardy, never grows in tufts, and being tender and succulent, makes excellent hay. It is a perennial, two to three feet high, flowering in June or July. Very scarce this year. Pound 40c; 3 lbs. \$1.00, postpaid. By freight, bu. of 14 lbs. \$2.75; 100 lbs \$17.00.

Timothy.

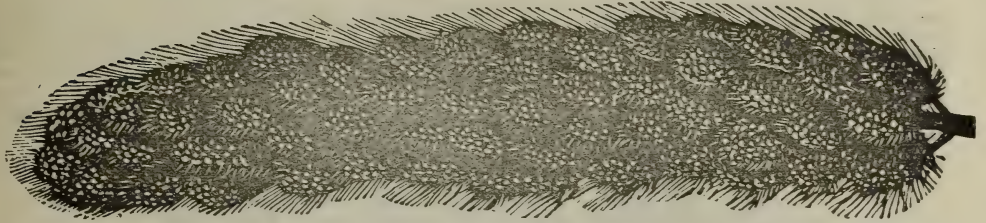


the world. We aim to supply our customers at lowest prices consistent with quality. Prices by mail, postpaid, per pound 10c; 3 lbs. 50c; bu. \$2.00. Write for prices on large quantities. Bags 15c extra.

We are the largest dealers in this line in South West Iowa, and our trade has been built up by handling only the best grade of new cleaned seed. We have placed thousands of orders and can please you with our choice Iowa grown Seed.

PRICES: Grass seeds are sold on a very close margin of profit and prices are constantly changing with the market. Should you desire a quantity of anything in this line, be sure to write us for special prices, naming the amount needed. Most kinds of grass seeds are somewhat higher in prices this year, but please remember that our quotations are for our best grades of cleaned seed, and we know that price is as low as such grades can be bought for anywhere. At the pound rate we prepay postage. Grain bags to hold seed 15 cents each extra.

German Millet.



German Millet, the true large headed variety and largely grown wherever its value is known. It helps out wonderfully when a short crop of hay is threatened, and produces two to three times as much per acre as timothy or clover. Write us and we will cheerfully quote prices on large quantities. Price, bu. \$1.25. Bags free.

New Siberian Millet.

This is a new and distinct variety, having bright red seed, produces a fine crop of hay about two weeks earlier than German Millet, is very leafy and of excellent quality. Sow 25 lbs. per acre. By mail per lb. 20c; 3 lbs. 50c; bu. \$1.25. Write us for prices on large quantities.

Evergreen Mixed Lawn Grass Seeds.

This is a mixture of the best varieties of grass seeds suited for growing together in central and northern states, and will make a beautiful, soft, velvety lawn and as handsome and green as an emerald, and is formed of grasses which keep green from early spring all through the hot, dry summer weather until late in the fall. It comes up quickly (about two weeks) after the seed are sown, and after once up it soon spreads to cover the ground and is ready for the lawn mower in six or eight weeks. It roots deeply on any soil and forms a dense, thick turf with no tendency to grow in tufts or clumps. It is permanent, maintaining its beauty for a lifetime, although it is a good plan to give any lawn a top seeding once in every three to five years. This mixture is from new crop, cleaned, pure seeds of the best varieties, well suited for even and permanent growth, as good as money can buy. It cannot be excelled for producing a rich, velvety lawn of beautiful dark green color. Price per qt. (will sow 300 square feet) 25c; 4 qts. 85c postpaid. By freight per bushel of 15 lbs. \$3.00; 50 lbs. \$8.00; 100 pounds (will sow one acre) \$15.00

Sweet Peas.

There is no annual grown that is more popular, or that is more admired by all than the Sweet Pea, with its dainty colors and delicate perfume. For cutting, for bouquets, vases, corsage and buttonhole wear, no flower except the rose can compare with them. To succeed best they should be sown as soon as the ground can be worked in the spring, and when well up given bush or strings to support them. They commence to bloom early, and if the flowers are picked as soon as they fade, will continue to bloom all summer. If allowed to form seed they will soon stop flowering and die down.

All Colors Mixed. This is also a very good mixture; contains over 20 varieties and will furnish fine flowers all through the season. Price, by mail, per lb. 40c; ½ lb. 15c; oz. 10c; pkt. 5c.

SEND POSTAGE STAMPS TO PAY FOR SEEDS.

Owing to the magnitude of our seed business and because we spend thousands of dollars annually for postage stamps, we are in a position to accommodate our friends and patrons who may find it inconvenient to send us money, or express orders, or drafts, in payment for seeds. We will accept postage stamps in payment for seeds to any amount, from those who may find it inconvenient to send us the money in the other approved forms.

INCLUDE SOME OF OUR SWEET PEAS IN YOUR ORDER.



In the following list we describe, arranged alphabetically all the flower seeds we have in stock, with the exception of a few novelties; we do not offer so extensive a list as many of our brother seedsmen do, but our assortment contains the OREAM, and only articles of real value and those best adapted to our climate and worthy of general culture by amateurs. There is much offered to the public that is only valuable in a botanical collection and will not please the amateur so well who grows flowers for beauty; and to experiment with high priced green-house seed which takes a professional florist to manage, generally ends in a waste a time and money. Every variety of flower seed we offer is tested under our own supervision and we positively throw out all dead seeds. To those unacquainted with different varieties, we can especially recommend our flower seed collection.

For \$1.00 you may select Seeds in Packets amounting to	\$1.25
For 2.00 you may select Seeds in Packets amounting to	2.50
For 3.00 you may select Seeds in Packets amounting to	3.75
For 4.00 you may select Seeds in Packets amounting to	5.00



ASTERS.

It is unnecessary to dwell on the great beauty of these popular favorites, as they are appreciated by every one. Our seed is the finest that France and Germany produce. We recommend our friends to plant a number of varieties, as no other annuals afford so magnificent a display during the summer and fall. Hardy annual.

Dwarf Chrysanthemum-flowered. Very desirable on account of its large and perfect flowers, great beauty and late blooming; mixed 10 inch.....5c

Queen of the Market. Of graceful, spreading habit; its great merit is its early flowering character being in full bloom fully two weeks before any other Aster begins to blossom; mixed colors, 12 inch.....5c

Fine Mixed. embracing a great many varieties and colors.....5c

AGERATUM.

Valuable plants for large beds or borders, and very useful where cut flowers are in demand; in bloom the whole summer; also good for winter blooming in pots, succeeding in any soil. Indispensable for bouquets. Hardy annuals.

Fine Mixed. 13 inch.....5c

BALSAMS.

Layd's Slippers, or Touch-me-not.

These are old favorites with every one owing to their handsome double flowers, brilliant colors and stately growth. To produce very double flowers, they must be transplanted into rich soil, 15 inches apart, in a sunny position, and frequently watered. Cutting out some of the side branches is also advisable, especially with the strong and bushy growing varieties. Half-hardy annuals.

Camelia-flowered. Double, very choice; spotted and variegated with white, mixed.....5c

Fine Mixed. Finest varieties and colors, mixed.....5c

BACHELOR'S BUTTON.

It is a beauty, the national flower of Germany, and a great favorite in all parts of the old country. A unique little plant, forming a dense mass of foliage, over which are borne hundreds of lovely blue blossoms beautifully fringed and serrated. Hardy annuals; 2 to 3 feet high. Price pkt.....5c

MARGUERITE CARNATION.

This new class of Marguerite Carnations will bloom about four months after sowing the seed. The flowers are of brilliant colors, of red, pink, white, variegated, etc., exquisitely sweet, and fully 80 per cent perfectly double. Succeed in open gardens or in pots. Sown in the autumn the flowers will be in full bloom early in the spring. Flowers can be had all the year round. Pkt.....5c

CALLIOPSIS, or Coreopsis.

One of the most showy, free-flowering of hardy annuals; its graceful and showy flowers; embracing nearly every shade of yellow, orange and rich brown, verging to crimson, and borne on slender stems; are particularly adapted for bouquets.

Fine Mixed. all colors; 1 to 2 feet.....5c

CANNA. Stately and highly ornamental foliage plants, growing from 5 to 10 feet high, and forming a most beautiful object for the lawn or for large circular beds. Mixed, all colors, pkt.....5c

CHRYSANTHEMUM.

A handsome plant, with striking and brilliant flowers blooming till late in autumn, when it is in full glory; producing double and single flowers of various shades; very attractive for bouquets and vases. Sometimes called "Painted Daisies." Hardy annuals.

Finest Mixed. Many colors; 18 inch.....5c

CANDYTUFT (Iberis)

Among the most useful of perfectly hardy annuals. Will grow in any soil, require no care, and produce neat clusters of flowers very freely.

Empress. A beautiful, pure white variety of branching habit, producing trusses of flowers. We can recommend this for a fine bed of early white flowers.....5c

Fine Mixed. Including many colors.....5c

COCKSCOMB.

A class of very magnificent, attractive and showy annuals, producing massive heads of rich shades and colors of great effect in the garden or in pots. Well adapted to our climate, as they will stand drouth well. Half-hardy annuals.

Finest Mixed, all colors; 2 feet.....5c

COLEUS.

Highly ornamental plants in endless variety of colors and shadings, indispensable for ribbon and carpet bedding, or as single specimens for pots and vases. Half-hardy annuals.

Finest Hybrids Mixed. 1 to 2 feet.....8c

DAHLIA.

Every one knows and admires the Double Dahlia, but few are aware that it can be grown so easily from the seed and flowers the first season. Take up the roots as soon as frost occurs in the fall, and preserve in a warm dry cellar. Half-hardy bulbs.

Double Mixed, Finest varieties, 2 to 4 feet.....5c

DIANTHUS. (Pink)

The China and Japan Pinks are deservedly very popular, as few flowers can equal them in beauty and profusion of bloom. They bloom continually all summer and fall, until overtaken by severe frost; they live overwinter and bloom finally again the second season. So satisfactory a class of flowers should be grown in large variety in every garden. Hardy biennial.

Chinesis. (Double Chinese Pink.) A splendid mixture, one of the finest varieties, 1 ft.....5c

Fancy Mixed, pkt.....5c

ESCHSCHOLTZIA (California poppy.)

Very attractive plants for beds, edging or masses, profuse flowering and fine cut foliage in bloom from June till frost; 1 foot. Hardy annuals.

Fine Mixd. Flowers yellow, and white; blossoms 2 inches in diameter.....5c

Golden West. The flowers of this new giant variety have large, over-lapping petals, often delicately waived at the edges. Their intense and shining color, immense size and lovely forms call forth the admiration of all.....5c

DAISY (Bellis Perennis.)

Will make young strong plants to carry over winter with protection, and blooms very early in the spring. Although saved only from fine double flowers, the seed produces a few singles and semi-doubles. Half-hardy perennials.

Fine Double Mixed, 6 inch.....5c

GOURDS. (Climbing) These curious and interesting plants should be more largely grown. All varieties mixed.....5c

HELIOTROPE.

A well-known profuse flowering and deliciously fragrant plant that every one loves. Splendid for bedding or pot culture. Can be easily raised from seed, but should be started early in the house. Half hardy perennial.

Fine Mixed. Choicest varieties mixed, 18 inch.....5c

HIBISCUS.

This elegant plant is perfectly hardy in any place and is one of the most beautiful hardy flowering plants we have. The colors range from pure white, to blush and deep pink. This is one of the most beautiful and showy lawn plants of recent introduction.

New Hybrids. Best mixed, including seed of the New Crimson Eye.....5c

LARKSPUR (Delphinium.)

Plants of great beauty, richness and endless variety of colors, with great duration and profusion of bloom. Few plants are so useful for their decorative qualities, either in the garden or when out for bouquets, etc. Hardy annuals.

Double Fine Mixed. Many varieties and colors.....5c

MIGNONETTE (Reseda Odorato.)

This fragrant little plant is probably the most popular annual grown. If the plants are thinned but they will grow stronger and produce larger spikes of flowers; and can be had during the whole year by sowing at intervals. Hardy annuals.

Sweet Scented. (Odorato.) The old variety, very fragrant, 1 ft. Per oz. 15c; pkt.....5c

Mignonette Mixed. Many varieties, pkt.....5c

MARIGOLD (Tagetes.)

A free-flowering plant of easy culture, with double flowers, of rich and beautiful colors, producing a splendid effect, whether planted in beds or borders; and continuing in beauty until destroyed by frost. Half-hardy annuals.

African Mixed. Best double colors, 2 feet.....5c



Legion of Honor. Dwarf, compact, with dark green, fern-like leaves; rich golden-yellow marked with velvety brown. Blooms abundantly from July until cut down by frost, 15 inch.....5c

ICE PLANT.

A handsome and curious plant for hanging baskets, rock work and vases. The leaves and stems appear as though covered with ice crystals. The whole plant is peculiarly brilliant in the sunshine, thriving best in a dry, loamy, or sandy soil, requiring a warm, sunny situation. Half hardy annuals.

Crystallinum. Flowers White, pkt.....5c

PORTULACA.

In brilliancy and beauty of colors Portulacas are unrivalled. They delight in sunny situations and light soils, where they rapidly carpet the ground, each plant covering a space of about 15 inches in diameter; 6 in. Half hardy annuals.

Finest Single mixed, a great variety of colors.....5c

Double Rose-flowered mixed, unsurpassed for brilliancy of color and great beauty, pkt.....5c

NASTURTIIUM DWARF.

One of our showiest and most popular annuals, forming compact plants, making gorgeous masses of rich colored and brilliant flowers, blooming in succession all through the season; they should be grown in rather poor soil. Half hardy annuals.

King of Tom Thumbs. Intense scarlet flowers, with rich dark foliage, pkt.....5c

Cloth of Gold. In striking contrast to the above, the foliage is a clear bright yellow, while the deep scarlet flowers add much to its beauty.....5c

Finest mixed. Many varieties and colors, per oz. 15c, pkt... 5c

NASTURTIIUM TALL.

The Tropaeolum Majus, or Tall Nasturtiums, are among the easiest grown and prettiest of climbers. They bear hot, dry weather very well, and thrive on poor soil. Very free bloomers and the green seed pods make excellent pickles; 10 feet. Hardy annuals.

Finest mixed tall nasturtium. Many bright colors. Per oz. 10c; pkt.....5c

PANSY (Heartsease.)

The Pansy is the most popular of all flowers grown from seed. It is everywhere popular, both for the brilliant beauty of its flowers and the long continuation of bloom. Pansies delight in a cool, moist situation, partially protected from the hot noon day sun; in exposed positions in the hot summer weather the flowers will be smaller. Seed sown the latter part of August or fore part of September will make strong young plants for early spring blooming. Protect in winter with leaves or evergreen branches. Hardy perennials.

White or Snow Queen. Flowers of a delicate, pure satiny white.....5c

Faust or King of the Black. Deep coal black, coming constant from seed; a group of this variety presents a fine appearance.....5c

Fine mixed. Fine varieties and colors mixed.....5c



Double and Single Petunia

and will richly compensate for the little care they require. They are in almost constant bloom all winter, and if the plants are transferred to a shady border they will bloom nearly all summer. Care should be taken in watering that no water fall on the buds as it causes them to rot. Greenhouse perennial.

Chinese Primrose. Choice fringed varieties mixed; the seed we offer is saved from one of the finest collections, 6 in.....10c

Ricinus (castor oil bean.)

Ornamental plant of stately growth and picturesque foliage, with brilliant colored fruit, producing a sub-tropical effect; fine for lawns, massing, or center plants for ribbon beds. Half hardy annuals.

Zanzibariensis. The largest castor bean in cultivation. An entirely new class from Africa, with leaves often measuring 2 feet across, some being light green, others bronze brown. For large foliage beds we know of nothing more striking and effective and are objects of beauty all summer and fall, 5c

Fine mixed. The best and choicest varieties mixed, pkt.....5c



DOUBLE AND SINGLE PETUNIA.

No class of flowers better repay the care required than the Petunias; easily raised from the seed; the richness of color and abundance of rich flowers make them indispensable for bedding plants. Every garden should have a bed of these magnificent flowers, a gay mass of bloom from June to hard frost. Hardy annual.

Fine mixed. Best of the older sorts, pkt.....5c

PHLOX DRUMMONDII.

Superb plants, prized for the profusion of their richly colored flowers of many hues, their long duration in bloom, and the grand effect they produce in clumps or masses. We invite particular attention to the Large Flowering as especially fine. Easy of culture, 18 inch. Hardy annual.

Alba. Pure white.....5c

Fine mixed. All varieties and colors.....5c

Double mixed. This variety is a profuse bloomer, and of great value for bouquets. They are of recent introduction and are specially desirable for cut flowers, lasting much better than the single sorts. To produce the best results they should be grown in a light soil. About 80 per cent of the seed sown will be double.....8c

PRIMULA (Chinese primrose.)

A charming and most profuse flowering plant, and one of the most desirable of house blooming plants.

STOCK (ten weeks.)

The Ten Week Stock is one of the most popular, beautiful and important of our garden favorites; whether for bedding, massing or pot culture, it is unsurpassed, either for brilliancy or color, exquisite fragrance, or profusion and duration of bloom. For winter blooming in the house sow seed in June. The seed we offer is from a celebrated German stock grower, from selected pot plants, and will produce more than three-fourths fine double flowers. Hardy annual.

New large flowering habit dwarf, with magnificent spikes of very large double flowers of all colors; mixed, 18 inch 9c

SALVIA (Flowering sage.)

The Salvia is one of the most beautiful of all flowers; the brilliant spikes of the scarlet flowers produce for months a dazzling effect. Of easy culture and fine for massing and bouquets. Half hardy annual. **New dwarf, or Bonfire.** (Large Flowering Scarlet Sage.) A splendid new sort blooming much earlier than old variety. The plants are dwarfier and more compact in habit, while the flowers are larger and more numerous and are of the brightest scarlet imaginable lasting until late in the fall, 2 ft. 10c

VERBENA.

A well-known favorite, and is valuable for bedding on account of their low trailing habit; blooms freely from seed, and are more healthy and make larger and hardier plants than if grown from cuttings; requires a very rich, mellow soil. The seeds sprout very unevenly, and some will not be started at the time others must be removed, hence the soil must be disturbed as little as possible. Half-hardy perennials.

Alba. Pure white, a desirable variety for florists or for the cemetery. 6c

Extra choice mixed. Seed saved from the finest collection of named sorts. 7c

ZINNIA (Youth and old age.)

Plants of great beauty, of branching habit, and splendid brilliant colored double flowers, rivalling in beauty and form double Dahlias. Bloom in great profusion and with increased splendor from June until cut off by frost; begins to bloom when quite small. Easy of culture; thrives in any good soil. Half hardy annuals.

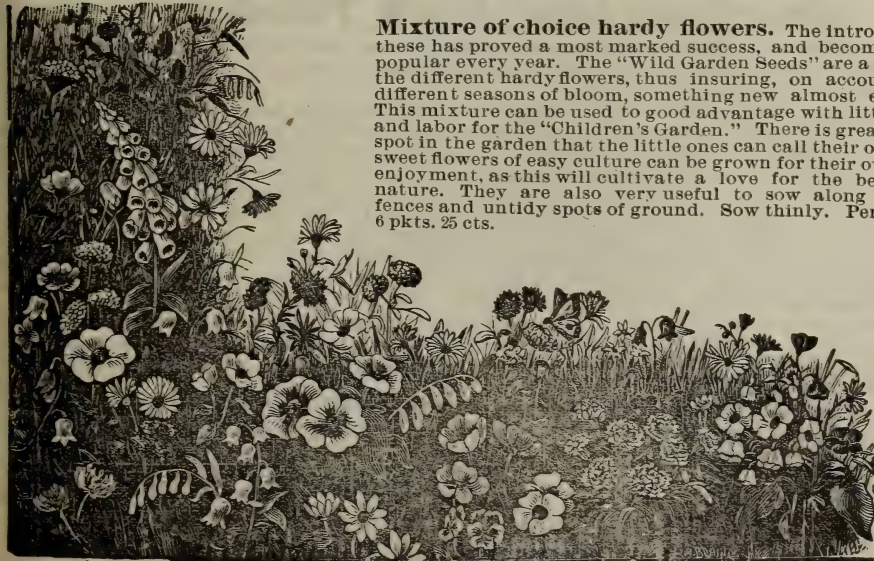
Double choice mixed. Finest large flowering varieties 3 feet 5c

Tom Thumb These Dwarf Double Zinnas produce compact dwarf bushes, varying 6 to 12 inches in height and from 6 to 14 inches in diameter, coming mostly true from seed. The little plants are covered with the handsome double flowers of many bright and rich colors. Plants are very free flowering, and continue in bloom until destroyed by frost. 5c



ZINNIA.

Wild Flower Garden.



Mixture of choice hardy flowers. The introduction of these has proved a most marked success, and becoming more popular every year. The "Wild Garden Seeds" are a mixture of the different seasons of bloom, thus insuring, on account of the different seasons of bloom, something new almost every day. This mixture can be used to good advantage with little expense and labor for the "Children's Garden." There is great need of a spot in the garden that the little ones can call their own, where sweet flowers of easy culture can be grown for their own special enjoyment, as this will cultivate a love for the beautiful in nature. They are also very useful to sow along roadsides, fences and untidy spots of ground. Sow thinly. Per pkt. 5 cts; 6 pkts. 25 cts.

AMERICAN LIVE STOCK POWDERS.



Save your Hogs

American Live Stock Powders

Makes hogs hungry, healthy and fat; they give sharp appetite as nothing else will; also affords the most perfect digestion and assimilation. They are a PERFECT TONIC that stimulates the vital organs to perform their natural functions. THEY KILL AND EXPEL WORMS and internal parasites and prevents fever and is an infallible preventive against hog cholera and other swine plague. There is nothing else made to do what it will do. It is a scientific vegetable compound and will revolutionize the hog industry by adding 40 PER CENT PROFIT TO HOG RAISING.

American Live Stock Powder Co., Shenandoah, Ia.

A PERFECTLY SAFE VEGETABLE COMPOUND.

They are a stimulating tonic, as well as a blood purifier, and a blood maker. They do what no stock food on earth is made to do. They cleanse the blood, purify the system and keep stock absolutely healthy.

SAVE YOUR HOGS.

Every farmer raises hogs. IF he saves them from disease they are the most profitably product of the farm. It's the easiest and quickest money the farmer makes. It is PROFIT that counts. Do farmers always study the profit side of the farm account? If so why let 40 per cent of all the hogs of the country die from disease before they are ready for market. FORTY PER CENT; this is a wonderful and alarming percentage; but statistics prove it. Can any farmer take the risk? Can you afford to take the risk when 25 cents will remove every part of this risk?

American Live Stock Powders.

Will remove every particle of danger from Hog Cholera, and other disease when properly administered with other food, at a cost of less than 25 cents per head, during the natural life time of the hog.

AMERICAN LIVE STOCK POWDERS are a simple preparation made from Roots, Herbs, Bark and Seeds. It is a condition Powder, not a so-called food. Don't allow yourself to get this point confused in your mind. American Live Stock Powders are absolutely harmless, even if taken into the human stomach. They create an appetite; they aid digestion and assimilation. They absolutely expel all worms in less than forty-eight hours; they move and regulate the bowels. They purify and make new blood. It tones up the system and your stock will show an improved condition, almost like magic, at once. It prevents Cholera, Coughing, Scours, Vomiting and Thumps; in fact it is the greatest discovery, as a Hog Cholera preventative and remedy ever before discovered by man, and if used by all the hog breeders and growers would revolutionize the hog industry of the world.

It will cause stock of all kinds, Horses, Cattle and Hogs, to thrive and grow faster than any stock food in existence, and will always keep them in a good healthy growing condition and will fatten in 30 to 60 days less time on full feed than any other preparation ever before offered or discovered.

TWENTY-FIVE CENTS per head, only, to insure your hogs against Cholera and other disease during his natural life time; at the same time get an additional and increased growth that will more than twenty times over pay for the condition powders.

THE AMERICAN LIVE STOCK POWDERS are sold on a GUARANTEE; SPOT CASH REFUNDED IN ANY CASE OF FAILURE. Feed them to your horses, cattle and hogs; they will not only save you money, but they will make you dollars for dimes spent for this unexcelled preparation.

We sell direct to the farmer and consumer, thus cutting out all middlemen's profits and reducing the cost and expense to a point which enables every stock farmer to try it. We put it up only in three size sacks, 25, 50 and 100 lbs. Prices, 25 lb. bag \$2.50; 50 lbs. \$5.00; 100 lb. sack \$9.00; freight prepaid to your nearest railroad station.

New Market, Iowa, Nov. 19, 1902. J. R. Ratekin & Son, Gentlemen: I hereby certify that I have used the American Live Stock powders among my hogs about three weeks with most satisfactory results. Before I began using it my hogs were very wormy and in bad condition but three days after I began feeding them the "Powders" the worms came from them in large quantities. They also vomited up worms. My hogs are doing well today, and I consider it a good investment. Respectfully,
F. L. Noble.

Imogene, Iowa. J. R. Ratekin & Son, Shenandoah, Iowa. Gentlemen: In regard to American Live Stock Powders, will say they will do what you recommend them to do. Have fed them to my shots, which were in bad condition and noted a change in a few days, also fed the powders to my horses with splendid results; as an appetiser and conditioner they cannot be beat. Yours,
H. F. Moehnert.

College Springs, Iowa. Oct. 17, 1902. J. R. Ratekin & Son. Gentlemen: I take pleasure in saying that I have been and am still using the American Live Stock powders among my poultry. Having used it about ten days, I am well pleased with the results and consider it a preventative as well as a cure for the roup. Respectfully, Mrs. Thos. Woodmansee.

Farragut, Iowa. Oct. 2, 1902. J. R. Ratekin & Son, Shenandoah, Iowa. Gentlemen: Your letter received and in reply am very glad to say the powders you left here did just as you said they would. I have fed some of the powders and as a result it kills the worms and gives the hogs an appetite and keeps them in very good order. I hadn't fed the powders three days till I noticed an improvement in my hogs. Being very much pleased with the result and wishing you success in your work, I am very gratefully yours, John Arterburn.

Strahan, Iowa, Oct. 8, 1902. Gentlemen: I have fed these powders to a horse that was badly run down in flesh and I noticed it removed worms and started it to thrive and gave it an appetite. I am feeding it to all my horses. I have fed it about ten days. C. R. Hallyer.

Imogene, Iowa, Oct. 8, 1902. Gentlemen: I have fed the American Live Stock Powders with good result. After feeding it to my pigs I noticed that it removed the worms and gave them a good appetite. I fed it to a team of mules that were not doing well and found as a result great quantities of small worms in the droppings of one of them. It is giving them a slick coat of hair and they are improving. I have fed it about two weeks. J. D. Buzzard.

Fregiht and Freight Rates.

We have obtained through our several railroad agents here, freight rates to 83 leading points, which will serve as a guide to approximate the freight rates from here to your nearest railroad station. The prices given for seeds of all kinds include bags free aboard the cars here, but we do not pay freight in any case, except the money is sent with the order to prepay it here, which is necessary if you have no railroad agent at your station, as railroad companies will not accept goods for such stations except they are first prepaid at starting point. In such cases where there is no agent, the parties ordering should always send money to prepay freight, and if more is sent than it costs it will always be returned to the sender.

In all cases where you want seed of any kind, whatever, in pound quantities, we can pack and send them safely and securely in a bag of corn, and will be pleased to do so, and you can therefore deduct eight cents per pound, from the pound prices, the amount of postage it would cost us if sent by mail.

Remember that express rates are about four times as much as freight rates, therefore don't neglect to order early and in plenty of time.

Remember always, that we ship seed same day order is received, and send shipping bill at same time: If to be shipped any time in future we always acknowledge order by first mail.

Shenandoah, Iowa, January 3, 1903.

Rates on Seed Corn, in bags, per 100 lbs., at this date, from Shenandoah, Iowa.

Atchison, Kansas	22c
Atlanta, Georgia	95c
Burlington, Iowa	24c
Buffalo, New York	47c
Chicago, Illinois	32c
Cincinnati, Ohio	42c
Council Bluffs, Iowa	11c
Cedar Rapids, Iowa	39c
Clinton, Iowa	43c
Decatur, Illinois	30c
Davenport, Iowa	27c
Detroit, Michigan	45c
Dallas, Texas	97c
Evansville, Indiana	42c
Indianapolis, Indiana	41c
Kansas City, Missouri	20c
Lincoln, Nebraska	24c
Louisville, Kentucky	42c
Little Rock, Arkansas	75c

Memphis, Tennessee	42c
Macon, Georgia	94c
Mobile, Alabama	88c
Nashville, Tennessee	57c
New Orleans, Louisiana	67c
Ottumwa, Iowa	11c
Omaha, Nebraska	15c
Peoria, Illinois	29c
Quincy, Illinois	27c
Richmond, Virginia	59c
Springfield, Illinois	29c
Springfield, Missouri	37c
Sioux City, Iowa	31c
St. Louis, Missouri	27c
Terra Haute, Indiana	39c
Texarkana, Arkansas	79c
Topeka, Kansas	32c
Vicksburg, Mississippi	67c
Wichita, Kansas	58c

We Are But Human.

We take Pride Always in Trying to be Correct in all our Shipments. However, we are but human, and occasionally make mistakes like other poor mortals, but when we make a mistake we want to remedy it. If in the course of business with us, you find an error or mistake on our part, please write us a letter with a plain statement of facts, and you may depend upon receiving honorable and pleasant treatment. Don't get angry and come at us like a hog going to war. We pride ourselves on having a large warehouse full of patience, and are not indifferent to facts pleasantly stated and separated from abuse.

TEXAS

"Empire of the South"



ITS RELATION TO THE STATE OF TEXAS.

THE MISSOURI, KANSAS & TEXAS RAILWAY SYSTEM, with more than twelve hundred (1,200) miles of line in Texas, reaches, with its own rails, the most important cities and towns of forty counties in the State. Its main line in Texas is from Denison to Galveston, with branches to Wichita Falls, San Antonio, Mineola, and to Shreveport, La. At Denison it connects with the main line from St. Louis, Hannibal and Kansas City, Mo. It has an excellent passenger and freight train service, and offers the most convenient route for the traveller or homeseeker en route to or from Texas. The Missouri, Kansas & Texas Railway is and has been for years an important factor in the upbuilding of Texas, and the Texan points with pride to the "Katy" as one of the solid institutions of the State.

The "Katy" Dining Stations.

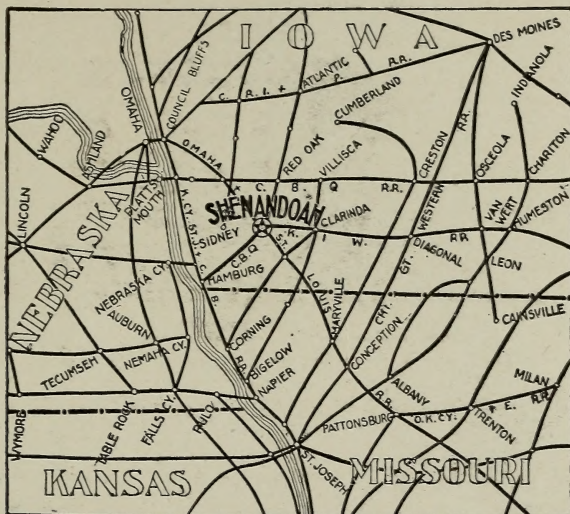
First-Class Service.

All Meals Fifty Cents.

The Dining Stations on this line at Sedalia, Nevada, Parsons, South McAlester, Muskogee, Denison, Dallas, Hillsboro and Smithville are the property of the Company, and are under the immediate supervision of Mr. E. E. Miller, Superintendent of Dining Service. These dining stations are not operated for profit. No expense is spared to supply the tables with all the delicacies of the season, prepared by chefs of acknowledged ability and experience.

THE NISHNABOTNA VALLEY.

Greatest Corn Growing District in the Greatest Corn State in the United States.



Shenandoah

Is located on the western line of Page county, bordering into Missouri on the south, and Fremont county on the west, the extreme southwest county in Iowa, and is in the "Great Nishnabotna River Valley." The city has 4,000 inhabitants, is on the main line of the great Wabash railroad, and on the main line Keokuk & Western, known as the "Burlington Route;" on the Red Oak and Lincoln line of the C. B. & Q., "Burlington System," thus giving Shenandoah the benefit of three trunk lines, and tapping about all the through lines centering into Omaha. Kansas City, Chicago and St. Louis and other intermediate points.

Page County

And the "Great Nishnabotna Valley" have long ago become famous throughout the United States, if not the world, for the corn it grows. Its location, climate and soil all unite and combine to the most perfect growth and maturity of the finest corn the world can produce. As far back as 1880, and before all its broad prairies were broken and brought under the magic hand of man, and the plow, the county of Page, 22x24 miles square, produced the enormous and unprecedented yield of *Six Millions, Two Hundred Thousand Six Hundred and Thirty-two Bushels of Indian Corn*, as shown by the United States census report, over three hundred and twenty bushels of corn for each inhabitant—man, woman and child resident in the county at that time. This is equal to the combined corn product, the same year, of the following states: Maine, New Hampshire, Massachusetts, Rhode Island and Connecticut, and in addition equal to more than any one of ten other states.

By the above it will be seen that Page county, Iowa, has made an unparalleled record, area compared, with any other county in the United States, or same amount of territory covered in the *wide world* and is justly proud of the name and banner she bears, "The Kingdom of Page, that grows the Greatest, Most and Best Corn in the World."

RATEKIN'S NEW SENSATION OATS

SEE
DESCRIPTION
IN
CATALOGUE



PRIDE OF NISHNA

PLANTED BY
A HALF MILLION FARMERS IN 1902.